DOCUMENT RESUME

ED 130 258 CS 003 003

AUTHOR	Trismen, Donald A.; And Others
TITLE	A Descriptive and Analytic Study of Compensatory Reading Programs, Volume I, Addendum I. Final Report.
INSTITUTION	Educational Testing Service, Princeton, N.J.; Office of Education (DHEW), Washington, D.C. Office of Planning, Budgeting, and Evaluation.
REPORT NO	ETS-PR-76-2
PUB DATE	Feb 76
CONTRACT	OEC-0-71-3715
NOTE	112p.; For related documents, see CS 003 002-009
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	*Compensatory Education Programs; Elementary Education; National Surveys; Program Evaluation; Reading; Reading Achievement; Reading Instruction; *Remedial Reading Programs; *Summer Programs; *Test Results
IDENTIFIERS	Elementary Secondary Education Act Title I; ESEA Title I

ABSTRACT

Since July 1971, the Educational Testing Service has planned and conducted a study of compensatory reading programs in United States public schools. This document, an addendum to the final report for phase two of the study, includes a discussion of the relationship of classroom observations and effectiveness in the phase two sample of noteworthy schools, a description of the study conducted in the summer of 1973, and an appendix containing questionnaires for administrators and teachers in the summer-program survey. Forty-six tables of findings are included. (JM)

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ADDENDUM I

TO THE

FINAL REPORT, VOLUME I

Contract No. OEC-0-71-3715

A DESCRIPTIVE AND ANALYTIC STUDY OF

COMPENSATORY READING PROGRAMS

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The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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Office of Planning, Budgeting, and Evaluation

February 1976

CS 003 003

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Acknowledgment

The project is indebted to Dr. Thomas J. Quirk, who directed the development of the Student and Teacher Observation Scales.

Chapter I: THE RELATIONSHIP OF CLASSROOM OBSERVATIONS AND EFFECTIVENESS IN THE "NOTEWORTHY" SAMPLE

Observational data were obtained from a group of schools supplementary to the 1972-1973 sample. The selection of these "noteworthy" schools is described in the Final Report, Volume I, pp. 34-35. The development and characteristics of the Student and Teacher Observation Scales are described in the Final Report, Volume I, pp. 26-31, and in three published monographs.[1,2,3]

The reading achievement and attitude toward reading measures administered to the entire 1972-1973 sample of schools were also administered to the "noteworthy" sample, which included 23 Title I funded schools out of a total of 34. Thus it was possible to obtain correlations, using the class mean as the unit of analysis, between the proportion of time spent in various teacher and student activity categories and the class achievement and attitude effectiveness indices. Although the classroom observers coded individual student (and teacher) behavior, it was on a time-sampling basis. Thus the smallest unit for which valid observational measurements were obtained was the class. It was, however, possible to classify each student within each class as either CR or NCR, thereby enabling the computation of correlations between observational variables and both CR and NCR effectiveness. These correlations were obtained, separately for CR and NCR data, after removing the effects of the pretest and the pretest squared from both posttest and the observational variables.

For the Teacher Observations, correlations were obtained separately within each of the 330 cells of the following factorial design:

---

[1] Quirk, Thomas J., Nalin, Katherine B., and Weinberg, Susan F. The Development of a Teacher Observation Instrument for Reading Instruction. PR-73-39, ETS, June 1973.

[2] Quirk, Thomas J., Weinberg, Susan F., and Nalin, Katherine B. The Development of a Student Observation Instrument for Reading Instruction. PR-73-38, ETS, June 1973.

[3] Quirk, Thomas J., Trismen, Donald A., Weinberg, Susan F., and Nalin, Katherine B. The Classroom Behavior of Teachers and Students During Compensatory Reading Instruction. PR-74-5, ETS, September 1973.

Grade (2, 4, 6)
Student status (CR/NCR)
Mode of Instruction (teacher-talk, other adult-talk, student-talk, machine, and no-talk)[1]
Content of Instruction (comprehension, pronunciation and word recognition, language structure, reading silently, spelling, listening instruction, non-reading instruction, management instruction, positive feedback, negative feedback, extraneous)[2]

For the Student Observations, correlations were obtained separately within each of the 288 cells of the following factorial design:

Grade (2, 4, 6)
Student status (CR/NCR)
Group of Instruction (teacher, other adult, peer, alone)[3]
Content of Instruction (comprehension, pronunciation and word recognition, language structure, reading silently, spelling, writing, listening instruction, non-reading instruction, management instruction, positive feedback, negative feedback, extraneous)[4]

Observer reliabilities for the student observational variables, as determined on the last day of training, were as follows:[5] reliabilities for the Group of instruction ranged from .81 to 1.0 with a median coefficient of .96; for the Content of instruction, the reliabilities ranged from .67 to .99 with a median coefficient of .90; for the Group-Content dimensions, the reliabilities ranged from .62 to .99 with a median coefficient of .86. Reliabilities for the Teacher observational variables were as follows:[6] reliabilities for the Mode of instruction ranged from .79 to .99 with a median coefficient of .94; for the Content of instruction, the reliabilities ranged from .54 to .98 with a median coefficient of .88; for the Mode-Content dimensions, the reliabilities ranged from .63 to .98 with a median coefficient of .85

---

[1] see Quirk et al., The Classroom Behavior of Teachers and Students During Compensatory Reading Instruction. PR-74-5, ETS, September 1973, pp. 5-6 for a description of Modes of Instruction

[2] see Quirk et al., pp. 6-10 for a description of Content of Instruction

[3] see Quirk et al., pp. 32-33 for a description of Group of Instruction

[4] see Quirk et al., pp. 33-43 for a description of Content of Instruction

[5] see Quirk et al., pp. 38-40 for a fuller explanation

[6] see Quirk et al., pp. 12-15

Analyses of variance were performed for the following comparisons, using as the dependent variables the correlation (transformed to Fisher's z coefficient) of (a) reading achievement effectiveness[1] and (b) attitude toward reading effectiveness[1] with the proportion of time spent in each of the activities defined by the above mentioned cells:

1. CR/NCR x teacher content of instruction, separately by grade
2. CR/NCR x teacher mode of instruction, separately by grade
3. grade x teacher content of instruction, separately by CR/NCR
4. grade x teacher mode of instruction, separately by CR/NCR
5. CR/NCR x student content of instruction, separately by grade
6. CR/NCR x student group of instruction, separately by grade
7. grade x student content of instruction, separately by CR/NCR
8. grade x student group of instruction, separately by CR/NCR

Table 1 shows the results of these analyses, in the order of the comparisons listed above.

[1]Effectiveness, for this analysis, was defined as posttest score, with the effects of pretest and pretest squared removed.

Table 1

Analyses of Variance of the Correlation Between Observational Variables and Effectiveness in the "Noteworthy" Sample

Dependent Variable	Independent Variables	F	D.F.	Prop. Total Variance Explained by Independent Variable
Grade 2				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	Teacher content (TC) of instruction	NS	10	
	CR/NCR x TC	NS	10	
	CR/NCR	NS	1	
	Teacher mode (TM) of instruction	NS	4	
	CR/NCR x TM	6.4[3]	4	.19
Grade 4				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	TC	2.3[1]	10	.19
	CR/NCR x TC	NS	10	
	CR/NCR	NS	1	
	TM	2.6[1]	4	.09
	CR/NCR x TM	NS	4	
Grade 6				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	TC	2.3[1]	10	.19
	CR/NCR x TC	2.2[1]	10	.16
	CR/NCR	NS	1	
	TM	NS	4	
	CR/NCR x TM	NS	4	
CR Effectiveness				
Correlation with Reading Achievement Effectiveness	Grade	NS	2	
	TC	2.9[2]	10	.16
	Grade X TC	NS	20	

Table 1 (cont.)

	Grade	NS	2	
	TM	NS	4	
	Grade x TM	NS	8	
NCR Effectiveness				
Correlation with Reading Achievement Effectiveness	Grade	NS	2	
	TC	NS	10	
	Grade x TC	1.9[2]	20	.20
	Grade	NS	2	
	TM	NS	4	
	Grade x TM	2.8[2]	8	.13
Grade 2				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	Student content (SC) of instruction	NS	11	
	CR/NCR x SC	NS	11	
	CR/NCR	4.1[1]	1	.03
	Student group (SG) of instruction	14.0[3]	3	.31
	CR/NCR x SG	11.2[3]	3	.18
Grade 4				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	SC	NS	11	
	CR/NCR x SC	NS	11	
	CR/NCR	NS	1	
	SG	12.8[3]	3	.29
	CR/NCR x SG	9.0[3]	3	.17
Grade 6				
Correlation with Reading Achievement Effectiveness	CR/NCR	NS	1	
	SC	NS	11	
	CR/NCR x SC	NS	11	
	CR/NCR	NS	1	
	SG	NS	3	
	CR/NCR x SG	NS	3	

Table 1 (cont.)

CR Effectiveness				
Correlation with Reading Achievement Effectiveness	Grade	NS	2	
	SC	2.2[3]	11	.16
	Grade x SC	NS	22	
	Grade	NS	2	
	SG	NS	3	
	Grade x SG	2.6[3]	6	.10
NCR Effectiveness				
Correlation with Reading Achievement Effectiveness	Grade	NS	2	
	SC	NS	11	
	Grade x SC	NS	22	
	Grade	3.3[1]	2	.04
	SG	7.6[3]	3	.14
	Grade x SG	7.3[3]	6	.21
Grade 2				
Correlation with Attitude Effectiveness	CR/NCR	NS	1	
	TC	NS	10	
	CR/NCR x TC	NS	10	
	CR/NCR	NS	1	
	TM	4.9[3]	4	.16
	CR/NCR x TM	2.5[1]	4	.08
Grade 4				
Correlation with Attitude Effectiveness	CR/NCR	4.4[1]	1	.03
	TC	2.9[2]	10	.21
	CR/NCR x TC	NS	10	
	CR/NCR	NS	1	
	TM	NS	4	
	CR/NCR x TM	NS	4	
Grade 6				
Correlation with Attitude Effectiveness	CR/NCR	NS	1	
	TC	2.0[1]	10	.17
	CR/NCR x TC	2.3[1]	10	.17

Table 1 (cont.)

	CR/NCR	NS	1	
	TM	NS	4	
	CR/NCR x TM	NS	4	
CR Effectiveness				
Correlation with Attitude Effectiveness	Grade	NS	2	
	TC	NS	10	
	Grade x TC	2.4[2]	20	.24
	Grade	NS	2	
	TM	NS	4	
	Grade x TM	NS	8	
NCR Effectiveness				
Correlation with Attitude Effectiveness	Grade	NS	2	
	TC	2.2[1]	10	.15
	Grade x TC	1.8[1]	20	.18
	Grade	NS		
	TM	NS		
	Grade x TM	NS		
Grade 2				
Correlation with Attitude Effectiveness	CR/NCR	NS	1	
	SC	NS	11	
	CR/NCR x SC	NS	11	
	CR/NCR	NS	1	
	SG	2.8[1]	3	.08
	CR/NCR x SG	NS	3	
Grade 4				
Correlation with Attitude Effectiveness	CR/NCR	NS	1	
	SC	NS	11	
	CR/NCR x SC	NS	11	
	CR/NCR	NS	1	
	SG	11.1[3]	3	.27
	CR/NCR x SG	3.5[1]	3	.08
Grade 6				
Correlation with Attitude Effectiveness	CR/NCR	NS	1	
	SC	NS	11	

Table 1 (cont.)

	CR/NCR x SC	NS	11	
	CR/NCR	NS	1	
	SG	NS	3	
	CR/NCR x SG	NS	3	
CR Effectiveness				
Correlation with Attitude Effectiveness	Grade	NS	2	
	SC	NS	11	
	Grade x SC	NS	22	
	Grade	3.4[1]	2	.03
	SG	9.9[3]	3	.17
	Grade x SG	2.2[1]	6	.07
NCR Effectiveness				
Correlation with Attitude Effectiveness	Grade	5.7[2]	2	.07
	SC	NS	11	
	Grade x SC	NS	22	
	Grade	5.5[2]	2	.07
	SG	NS	3	
	Grade x SG	NS	6	

[1].05 level [2].01 level [3].001 level

Examination of Table 1 reveals numerout significant relationships at both the main effect and interaction levels. In the discussion to follow, significant differences at the main effect level are interpreted only when the accompanying interaction is non-significant.

Cell Means For Statistically Significant Main Effects and Interactions

In grade 2, a significant interaction is shown between CR/NCR and teacher mode of instruction. Table 2 shows the CR/NCR x TM mean correlations (all analyses were performed on correlation coefficients transformed to Fisher's z coefficient; the means in the following tables have been retransformed into correlation coefficients).

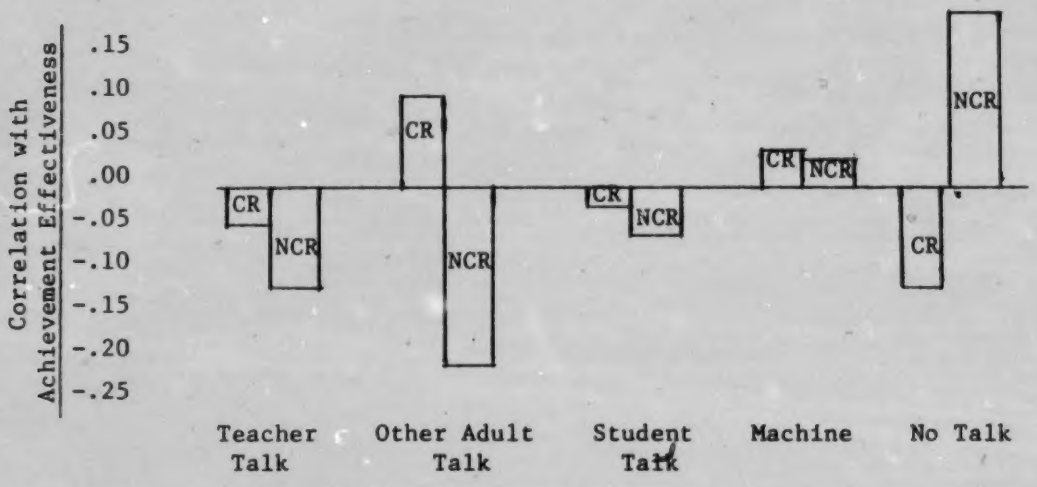
Table 2

Grade 2 CR/NCR x TM Interaction Means
(Achievement Effectiveness)

	Teacher Talk	Other Adult Talk	Student Talk	Machine	No Talk
CR	-.04	.09	-.02	.04	-.12
NCR	-.13	-.22	-.06	.03	.16

Figure 1 shows graphically the CR/NCR x TM interaction of Table 2. The interaction is represented by the differences among the five patterns of the paired histograms.

Figure 1



Inspection of Figure 1 (and Table 2) shows that the difference between the "Other Adult Talk" and "No Talk" patterns (they are virtually opposites) is a major influence contributing to the CR/NCR x Teacher Mode of Instruction interaction. It seems that achievement of CR students is positively associated with talk by adults other than the teacher (e.g., teacher aides) and negatively associated with an absence of talk, while the reverse is true for NCR students.

Table 3 shows means for the Teacher Content of Instruction main effect in grade 4.

Table 3

Grade 4 TC Main Effect Means
(Achievement Effectiveness)

Comprehension	.02
Pronunciation and Word Recognition	-.06
Language Structure	.14
Reading Silently	-.12
Spelling	.09
Listening Instruction	.06
Non-Reading Instruction	-.09
Management Instruction	-.05
Positive Feedback	-.04
Negative Feedback	-.07
Extraneous	.03

Reference to Table 3 shows the Teacher Content of Instruction categories of Language Structure and Spelling to have relatively large positive relationships to reading achievement effectiveness, and Reading Silently and Non-Reading Instruction to have relatively large negative relationships to reading achievement effectiveness.

Following are tables showing cell means for all the remaining significant interactions and all significant main effects unconfounded by significant interactions.

Table 4

Grade 6 CR/NCR x TC Interaction Means
(Achievement Effectiveness)

	CR	NCR
Comprehension	.02	.29
Pronunciation and Word Recognition	-.11	-.18
Language Structure	.24	-.19
Reading Silently	-.02	.02
Spelling	-.27	-.14
Listening Instruction	-.18	-.04
Non-Reading Instruction	.07	-.17
Management Instruction	.08	.20
Positive Feedback	-.02	-.16
Negative Feedback	-.06	-.18
Extraneous	-.12	.04

Table 5

CR TC Main Effect Means
(Achievement Effectiveness)

Comprehension	.05
Pronunciation and Word Recognition	-.15
Language Structure	.15
Reading Silently	-.01
Spelling	-.12
Listening Instruction	-.09
Non-Reading Instruction	-.10
Management Instruction	.03
Positive Feedback	.02
Negative Feedback	-.07
Extraneous	-.07

Table 6

NCR Grade x TC Interaction Means
(Achievement Effectiveness)

	Grade 2	Grade 4	Grade 6
Comprehension	-.02	.02	.16
Pronunciation and Word Recognition	.01	-.06	-.15
Language Structure	.06	.14	.03
Reading Silently	-.00	-.12	-.00
Spelling	-.01	.09	-.21
Listening Instruction	-.13	.06	-.11
Non-Reading Instruction	-.22	-.09	-.05
Management Instruction	.05	-.05	.14
Positive Feedback	.06	-.04	-.09
Negative Feedback	-.03	-.07	-.12
Extraneous	-.05	.03	-.04

Table 7

NCR Grade x TM Interaction Means
(Achievement Effectiveness)

	Grade 2	Grade 4	Grade 6
Teacher Talk	-.09	-.02	-.05
Other Adult Talk	-.07	.06	-.09
Student Talk	-.04	.04	.02
Machine	.04	-.07	-.01
No-Talk	.02	-.06	-.06

Table 8

Grade 2 CR/NCR x SG Interaction Means
(Achievement Effectiveness)

	CR	NCR
Teacher	.16	-.25
Other Adult	.15	.70
Peer	-.21	-.06
Alone	-.18	.00

Table 9

Grade 4 CR/NCR x SG Interaction Means
(Achievement Effectiveness)

	CR	NCR
Teacher	.01	.05
Other Adult	.15	.84
Peer	-.08	-.44
Alone	-.07	-.14

Table 10

CR SC Main Effect Means
(Achievement Effectiveness)

Comprehension	.09
Pronunciation and Word Recognition	.34
Language Structure	-.07
Reading Silently	-.07
Spelling	-.00
Writing	.33
Listening Instruction	-.18
Non-Reading Instruction	-.02
Management Instruction	-.17
Positive Feedback	-.06
Negative Feedback	-.08
Extraneous	-.01

Table 11

CR Grade x SG Interaction Means
(Achievement Effectiveness)

	Grade 2	Grade 4	Grade 6
Teacher	-.16	.01	-.11
Other Adult	.15	.15	.01
Peer	-.21	-.08	.33
Alone	-.18	-.07	-.04

Table 12

NCR Grade x SG Interaction Means
(Achievement Effectiveness)

	Grade 2	Grade 4	Grade 6
Teacher	-.26	.05	-.02
Other Adult	.70	.84	-.45
Peer	-.06	-.41	-.05
Alone	.00	-.14	-.12

Table 13

Grade 2 CR/NCR x TM Interaction Means
(Attitude Effectiveness)

	Teacher Talk	Other Adult Talk	Student Talk	Machine	No Talk
CR	-.03	.01	-.07	.15	.10
NCR	-.04	-.25	.08	.14	.06

Table 14

Grade 4 CR/NCR Main Effect Means
(Attitude Effectiveness)

CR	-.01
NCR	.07

Table 15

Grade 4 TC Main Effect Means
(Attitude Effectiveness)

Comprehension	.15
Pronunciation and Word Recognition	.11
Language Structure	-.01
Reading Silently	.07
Spelling	-.02
Listening Instruction	.07
Non-Reading Instruction	.19
Management Instruction	.10
Positive Feedback	.05
Negative Feedback	.00
Extraneous	-.17

Table 16

Grade 6 CR/NCR x TC Interaction Means
(Attitude Effectiveness)

	CR	NCR
Comprehension	-.01	.01
Pronunciation and Word Recognition	-.01	.10
Language Structure	-.07	-.42
Reading Silently	.23	-.34
Spelling	.04	.27
Listening Instruction	-.12	.21
Non-Reading Instruction	.21	.09
Management Instruction	.01	-.09
Positive Feedback	-.30	-.03
Negative Feedback	.03	.16
Extraneous	-.11	-.30

Table 17

Grade 6 CR/NCR x TM Interaction Means
(Attitude Effectiveness)

	Teacher Talk	Other Adult Talk	Student Talk	Machine	No Talk
CR	-.07	.06	-.03	.09	-.10
NCR	.00	-.06	.00	-.16	.04

Table 18

CR Grade x TC Interaction Means
(Attitude Effectiveness)

	Grade 2	Grade 4	Grade 6
Comprehension	-.08	.17	-.01
Pronunciation and Word Recognition	.03	.21	-.01
Language Structure	.01	-.16	-.07
Reading Silently	-.01	.02	.23
Spelling	-.00	-.17	.04
Listening Instruction	-.03	.08	-.12
Non-Reading Instruction	-.08	.03	.21
Management Instruction	.19	-.10	.01
Positive Feedback	.01	.04	-.31
Negative Feedback	.07	-.03	.03
Extraneous	.24	-.19	-.11

Table 19

NCR Grade x TC Interaction Means
(Attitude Effectiveness)

	Grade 2	Grade 4	Grade 6
Comprehension	.23	.12	.01
Pronunciation and Word Recognition	-.29	.01	.10
Language structure	.04	.14	-.42
Reading silently	-.05	.12	-.34
Spelling	-.01	.14	.27
Listening Instruction	-.00	.06	.21
Non-Reading Instruction	.17	.33	.09
Management Instruction	.02	-.11	-.09
Positive Feedback	-.07	.06	-.03
Negative Feedback	-.11	.04	.16
Extraneous	.02	-.15	-.30

Table 20

Grade 2 SG Main Effect Means
(Attitude Effectiveness)

Teacher	.00
Other Adult	.17
Peer	-.01
Alone	-.04

Table 21

Grade 4 CR/NCR x SG Interaction Means
(Attitude Effectiveness)

	CR	NCR
Teacher	.40	.22
Other Adult	.14	.31
Peer	-.16	-.25
Alone	-.29	.10

Table 22

CR Grade x SG Interaction Means
(Attitude Effectiveness)

	Grade 2	Grade 4	Grade 6
Teacher	.11	.40	-.21
Other Adult	.21	.14	-.25
Peer	.06	-.16	-.26
Alone	-.13	-.29	-.22

Table 23

NCR Grade Main Effect Means
(Attitude Effectiveness)

Grade 2	-.00
Grade 4	.10
Grade 6	-.29

Relationships to Achievement Effectiveness

In general, the foregoing achievement results are characterized by interaction effects. Relatively few main effects unconfounded by accompanying interaction effects were significant. In particular, the CR/NCR comparison showed no significant differences, but served to moderate relationships among Teacher Content of Instruction, Teacher Mode of Instruction, and Student Group of Instruction categories. Teacher Content and Teacher Mode both had several relationships to effectiveness, but of the two corresponding student variables, student Group showed by far the largest number of relationships. Examination of the relevant means tables suggests a greater effectiveness of the "Other Adults" group with NCR students in grade 4, and an increasingly beneficial effect of peer group interaction at the higher grade levels.

Relationships to Attitude Effectiveness

As was pointed out with regard to achievement effectiveness, interactions are a prominent part of the entire picture of relationships to attitude effectiveness, either as effects by themselves or as confounding influences on main effects. Teacher Content of

Instruction seems to be a more frequent component of significant comparisons than does Teacher Mode of Instruction. As was the case with achievement effectiveness, Student Group of Instruction seems a more influential variable than does Student Content of Instruction. The CR/NCR distinction enters into relatively few significant comparisons, almost always as an interaction component. The trend noted with respect to achievement effectiveness of the beneficial effect of the "Other Adults" group with NCR students is also apparent in the attitude effectiveness data at grade 4.

The picture presented by the preceding tables and discussion is one of complexity, of interdependencies among what is being said, who is saying it, and in what social context it is being uttered. Because of this complexity, any generalization should be undertaken and considered only with great caution. Nevertheless, it does seem that relationships can be shown between observations of classroom activities and achievement and attitude effectiveness. Still more tentatively it appears that with respect to both achievement and attitude effectiveness, the composition of the group within which a student receives his instruction is more influential than is the content of that instruction. However, with respect to attitude effectiveness only, the content of instruction seems to be a more frequent influence than the source (teacher, "other adult," etc.) of that instruction.

Chapter II: THE SUMMER STUDY

Preliminary screening questionnaires were sent in April 1973 to the 141 schools in the Phase II sample which had indicated in their Principal Questionnaire that they would or might have a summer reading program in 1973. The purpose of the screening questionnaire was to obtain a more recent determination of which schools were planning to have or participate in a summer program, and to obtain a small amount of program descriptive information from those that were. Two screening questionnaires were not returned. Of the 139 that were, 61 (44%) reported that they would not offer a summer program, 25 (18%) that they still did not know at that time whether they would offer a summer program, 9 (7%) that they would offer a summer program but did not wish to participate in the summer study, and 44 (32%) that they would offer a summer program and were willing to participate in the summer study. Of the 25 "do not know" schools, 13 eventually offered a summer program, but were too late to be included in the summer study. Of the 44 schools that were willing to participate in the summer study, 7 were eliminated because their program included too few students for meaningful analysis, and 10 were eliminated for miscellaneous reasons, leaving a total of 27 participants. All 27 returned summer study questionnaires, but 2 schools did not provide usable student achievement and attitude scores, and were therefore excluded from analyses of those data.

Summer Study Schools vs. all other Phase II Schools. It is of interest to compare the 25 schools which participated in the summer study and produced usable, complete data with the 233 Phase II schools which, for a variety of reasons described above, did not. Table 24 shows mean values for each of the two groups for a variety of descriptive continuous variables measured during the 1972-1973 school year.

Table 24

Comparisons of Summer Study and Non-Summer Study Schools: Continuous Variables

Variable	Grade 2				Grade 4				Grade 6			
	Summer Study (N=25)		Non-Summer Study (N=233)		Summer Study (N=25)		Non-Summer Study (N=233)		Summer Study (N=25)		Non-Summer Study (N=233)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Phase II Achievement Effectiveness	0.11	5.08	0.03	4.53	-0.53	3.29	0.08	4.4	-0.28	3.57	-0.05	3.38
SES Index	0.18	1.56	0.17	1.20	0.18	1.56	0.17	1.20	0.18	1.56	0.17	1.20
Teacher Experience	0.26	0.78	0.06	0.67	-0.08	0.55	0.01	0.70	0.26	0.85	0.15	0.82
Teacher Satisfaction with Administration	0.74	0.99	0.18	0.83	0.24	0.97	0.20	0.96	0.50	0.83	-0.05	0.88
Teacher Attitude Toward Academic Capabilities of Disadvantaged Children	0.36	1.00	0.21	0.94	0.36	0.98	0.22	1.02	-0.05	0.66	0.02	0.97
% CR Students	38	30	37	33	38	30	35	31	37	32	31	31

Examination of the Summer Study/Non-Summer Study differences relative to their standard deviations shows that Teacher Experience in grade 2 and Teacher Satisfaction with the Administration in grades 2 and 6, all higher for Summer Study schools, are worthy of some note.

In addition, the two groups of schools were compared in terms of several categorical variables, also measured during the 1972-1973 school year. Table 25 shows the resulting response frequency distributions. These variables are descriptive of the school as a whole, and are therefore not shown separately by grade.

Examination of Table 25 shows few differences between summer study and non-summer study schools with respect to enrollment or percent white or Caucasian students. However, there seems to be a tendency for the summer study schools to be located more frequently (relative to non-summer study schools) in the suburbs and to be funded more frequently by Title I during the regular school year.

Another way of assessing the differences between the summer study and non-summer study schools is to compute 95% confidence intervals within which the summer study achievement means would fall if summer data had been available for the non-summer study schools. This kind of analysis has been described in the Phase I Report, pages 17-29, and the Final Report, Volume I, pages 37-41. Table 26 shows the obtained confidence intervals and bias estimates for each reading achievement score. Since all the obtained confidence intervals are relatively large, only the results for relatively small values of the subjective coefficients θ_1 and θ_2 ($\theta_1 = \theta_2 = .10$) are given. ($\theta_1$ is a subjective coefficient of variation representing the degree to which the regression coefficients of the non-summer study group differ from those of the summer study group. θ_2 is a subjective coefficient of variation representing the degree to which the summer study and non-summer study reading achievement means would differ if their predictor variables distributions were identical. It is thus an index of the predictive importance of all unmeasured independent variables.) The predictor variables used were school SES, enrollment, and percent white or Caucasian.

Table 25

Comparisons of Summer Study and Non-Summer Study Schools: Categorical Variables

Variable	Categories	Summer Study Schools Freq.	Summer Study Schools %	Non-Summer Study Schools Freq.	Non-Summer Study Schools %
School enrollment	Less than 100	1	4	7	3.1
	100-299	2	8	45	19.8
	300-499	12	48	73	32.2
	500-699	6	24	68	30.0
	700-899	2	8	16	7.0
	900 or more	2	8	18	7.9
% White or Caucasian Students	None	1	4	0	0.0
	1-10%	1	4	13	5.7
	11-50%	2	8	23	10.0
	51-90%	6	24	66	28.8
	91-100%	15	60	127	55.5
Urbanicity	Large city, over 500K	0	0	3	1.6
	Large city, 200-500K	0	0	12	6.5
	Suburb of a large city	4	21	20	10.8
	Rural area near a large city	1	5.3	24	12.9
	Middle-size city, 50-200K	0	0	13	7.0
	Suburb of a middle-size city	10	52.6	63	33.9
	Rural area near middle-size city	0	0	8	4.3
	Small city or town, < 50K	1	5.3	12	6.5
	Rural area, not near city	3	15.8	31	16.7
Funding	Total Title I	10	40	78	33.8
	Partial Title I	5	20	16	6.9
	Non-Title I	2	8	27	11.7
	NCR School	8	32	110	47.6

Table 26

Bias Analyses: Summer Study Schools vs. Non-Summer Study Schools

Grade	Test	Summer Study Reading Achievement Raw Score Mean	Predictors/ Criterion Multiple Correlation	% Bias	95% Confidence Interval Around Estimated Total Group Reading Achievement Mean	
					Upper Limit	Lower Limit
2	Coop. Primary Reading	30.9	.56	-.06	43.2	18.5
	MAT Word Knowledge	29.9	.77	-.15	35.8	24.0
	MAT Sentences	10.3	.68	-.06	12.4	8.2
	MAT Stories	19.6	.58	-.11	27.0	12.1
	MAT Reading	29.9	.63	-.09	42.3	17.4
	MAT Total	59.8	.69	-.12	83.8	35.7
	Battery Total	90.7	.66	-.10	151.0	30.3
4	Coop. Primary Reading	34.5	.56	-.18	44.9	24.0
	MAT Word Knowledge	31.1	.48	-.00	47.5	14.6
	MAT Reading	22.3	.41	+.25	37.2	7.6
	MAT Total	53.3	.45	+.10	107.1	-0.3*
	Battery Total	87.8	.48	-.01	184.1	-8.5*
6	STEP Reading	34.8	.49	-.44	56.5	12.9
	MAT Word Knowledge	39.9	.77	-.45	49.2	30.3
	MAT Reading	29.5	.68	-.49	41.4	17.4
	MAT Total	69.5	.73	-.47	102.9	35.4
	Battery Total	104.1	.64	-.45	204.3*	3.0

*Negative means or means above the possible score range are a possible product of this analysis.

The entries in the "% Bias" column of Table 26 are relatively small. They are to be interpreted in the following manner: e.g., "for grade 2, we estimate that the Cooperative Primary Reading mean for the combined summer study/non-summer study group would have been .06% lower if the summer achievement data for the non-summer study group had been included."

Examination of the obtained 95% confidence intervals shows them to be very large. From this result it can be concluded that, with respect to Summer 1973 reading achievement scores, the summer study schools are importantly different from the remainder of the Phase II sample. The predominantly negative sign of the various % bias estimates indicates that, in general, summer study schools have higher estimated achievement scores than do the other Phase II schools.

Summer Study Schools vs. schools which refused to participate in the summer study and schools which were excluded because of too few participants. Comparisons were made of the 25 summer study schools with the 9 schools which offered a summer program but refused to participate in the summer study, and with the 7 schools which were eliminated because their program included too few students for meaningful analysis. Table 27 shows mean values for each of these three groups for a variety of descriptive continuous variables measured during the 1972-1973 school year.

Comparing the summer study schools first to those schools which refused participation, examination of Table 27 shows the latter to be less effective at grade 2, but more effective at grade 6. The schools which refused also seemed to have higher proportions of CR students in grades 2 and 4, but a lower proportion in grade 6. The summer study schools were of lower socioeconomic status, and had more experienced teachers in grade 2. Teachers in the summer study schools expressed greater satisfaction with the administration in grade 2, and better attitudes toward the academic capabilities of disadvantaged children in grades 2 and 4.

Table 27

Comparisons of Summer Study Schools, Schools Which Refused to Participate in The Summer Study, and Schools Which Were Eliminated Because of Too Few Participants: Continuous Variables

	Grade 2						Grade 4						Grade 6					
	Summer Study (N=25)		Refused (N=9)		Too Few Students (N=7)		Summer Study (N=25)		Refused (N=9)		Too Few Students (N=7)		Summer Study (N=25)		Refused (N=9)		Too Few Students (N=7)	
Variable	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Phase II Achievement Effectiveness	0.11	5.08	-0.73	2.41	-0.10	3.97	-0.53	3.29	-0.51	3.45	0.59	3.17	-0.28	3.57	1.76	4.80	1.90	2.88
SES Index	0.18	1.56	0.59	1.10	0.77	0.77	0.18	1.56	0.59	1.10	0.77	0.77	0.18	1.56	0.59	1.10	0.77	0.77
Teacher Experience	0.26	0.78	-0.34	0.64	0.50	0.25	-0.08	0.55	-0.18	0.60	0.58	0.87	0.26	0.85	0.24	0.84	0.73	1.58
Teacher Satisfaction with Administration	0.74	0.99	0.42	0.29	-0.18	0.42	0.24	0.97	0.08	0.66	0.45	1.24	0.50	0.83	0.39	0.95	0.99	1.73
Teacher Attitude Toward Academic Capabilities of Disadvantaged Children	0.36	1.00	-0.13	0.85	-0.02	0.55	0.36	0.98	0.12	0.39	0.61	0.64	-0.05	0.66	0.13	0.85	0.26	0.43
% CR Students	38	30	44	38	38	39	38	30	50	36	29	34	37	32	31	30	45	25

Comparing the summer study schools to those schools eliminated because of too few students, we find that the latter are more effective in grades 4 and 6, and have a higher socioeconomic status. Summer study schools have teachers which are more experienced and have better attitudes toward the administration in grade 2. Teacher attitudes toward the academic capabilities of disadvantaged children tend to be higher in the summer study schools in grade 2, but lower in grades 4 and 6.

In addition, the three groups of schools were compared in terms of several categorical variables, also measured during the 1972-1973 school year. Table 28 shows the resulting response frequency distributions. These variables are descriptive of the school as a whole, and are therefore not shown separately by grade.

Examination of Table 28 should be undertaken with more than the usual amount of caution, because of the small numbers of schools in the "refused" and "inadequate N" categories. It is of interest to note, however, an apparent relative tendency of large schools to refuse participation, and the concentration of schools with too few students in the 91-100% white or Caucasian category. The "inadequate N" schools also tend not to offer compensatory reading programs during the regular school year.

Bias analyses similar to the one previously reported for the Summer Study Schools/Non-Summer Study Schools comparison were performed to estimate the confidence intervals within which the various summer study achievement means would have fallen if summer achievement data had been available for the schools which refused to participate or for the schools which were eliminated because of too few students. Table 29 shows the obtained confidence intervals for the preceding analysis, $\theta_1 = \theta_2 = .10$, and the predictor variables used were school SES, enrollment, and percent white or Caucasian.

Table 28

Comparisons of Summer Study Schools, Schools Which Refused to Participate in The Summer Study, and Schools Which Were Eliminated Because of Too Few Participants: Categorical Variables

Variable	Categories	Summer Study Schools		Schools Which Refused		Schools With Too Few Students	
		Freq.	%	Freq.	%	Freq.	%
School enrollment	Less than 100	1	4	0	0	1	14.3
	100-299	2	8	0	0	1	14.3
	300-499	12	48	1	11.1	3	42.9
	500-699	6	24	3	33.3	2	28.6
	700-899	2	8	2	22.2	0	0
	900 or more	2	8	3	33.3	0	0
% White or Caucasian Students	None	1	4	0	0	0	0
	1-10%	1	4	1	11.1	0	0
	11-50%	2	8	0	0	1	14.3
	51-90%	6	24	2	22.2	0	0
	91-100%	15	60	6	66.7	6	85.7
Urbanicity	Large city, over 500K	0	0	0	0	0	0
	Large city, 200-500K	0	0	0	0	0	0
	Suburb of large city	4	21	0	0	2	40
	Rural area near large city	1	5.3	1	20	0	0
	Middle-size city, 50-200K	0	0	1	20	0	0
	Suburb of middle-size city	10	52.6	2	40	2	40
	Rural area near middle-size city	0	0	0	0	0	0
	Small city or town, < 50K	1	5.3	1	20	0	0
	Rural area, not near city	3	15.8	0	0	1	20
Funding	Total Title I	10	40	5	55.6	2	28.6
	Partial Title I	5	20	2	22.2	0	0
	Non-Title I	2	8	1	11.1	0	0
	NCR School	8	32	1	11.1	5	71.4

Table 29

Bias Analyses: Summer Study Schools, Schools Which Refused to Participate in the Summer Study, and Schools Which Were Eliminated from The Summer Study Because of An Insufficient Number of Students

Grade	Test	Summer Study Rdg. Achievement Raw Score Mean	Predictors/ Criterion Mult. Correlation	% Bias		95% Confidence Interval Around Estimated Total Group Reading Achievement Mean			
						Refused		Too Few Students	
				Refused	Too Few Students	Upper Limit	Lower Limit	Upper Limit	Lower Limit
2	Coop. Primary Rdg.	30.9	.56	+.54	-1.27	38.2	23.9	36.3	24.7
	MAT Word Knowledge	29.9	.77	+.23	-1.08	32.2	27.8	31.4	27.8
	MAT Sentences	10.3	.68	+.59	-1.43	11.2	9.6	10.8	9.5
	MAT Stories	19.6	.58	+.83	-1.66	24.0	15.5	22.7	15.8
	MAT Reading	29.9	.63	+.75	-1.58	37.4	22.9	35.3	23.5
	MAT Total	59.8	.69	+.49	-1.33	74.0	46.2	70.4	47.7
	Battery Total	90.7	.66	+.51	-1.31	128.1	54.3	119.7	59.4
4	Coop. Primary Rdg.	34.5	.56	+1.34	-1.15	40.6	29.4	38.7	29.6
	MAT Word Knowledge	31.1	.48	+1.44	-0.75	41.4	21.6	38.9	22.8
	MAT Reading	22.3	.41	-0.43	-0.56	31.3	13.2	29.6	14.8
	MAT Total	53.3	.45	+0.68	-0.68	87.1	20.3	80.2	25.7
	Battery Total	87.8	.48	+0.95	-0.87	148.7	28.6	136.0	38.0
6	STEP Reading	34.8	.49	+1.00	-0.91	48.5	21.9	45.4	23.7
	MAT Word Knowledge	39.9	.77	+1.38	-1.29	44.9	36.1	43.0	35.8
	MAT Reading	29.5	.68	+0.73	-1.37	36.7	22.8	34.8	23.5
	MAT Total	69.5	.73	+1.10	-1.32	90.3	50.1	85.0	52.1
	Battery Total	104.1	.64	+1.08	-1.19	167.8	42.7	153.9	51.1

Examination of Table 29 shows the percent bias estimates to be almost uniformly positive for the schools which refused to participate, indicating that the addition of these schools to the summer study group would have the effect of raising reading achievement means for the combined group. The percent bias estimates for the schools with too few students were uniformly negative, indicating that the addition of these schools to the summer study group would lower reading achievement means for the combined group. The 95% confidence intervals shown in Table 29 are all very large, indicating that the addition of either group of schools to the summer study group could have made a substantial difference in terms of summer program achievement means.

Questionnaires (see Appendix) similar to the ones used in the Phase II study, but designed specially for summer programs, were sent to participants in the 27 schools. Testing of the students was conducted once, during the next-to-the-last week of each summer school. Test administrators were instructed that only those students who had participated in one or both of the 1972-1973 school year test administrations need be tested, since planned analyses would only include those students.

Descriptions of the summer programs. Questionnaire descriptions of different facets of the 27 summer programs were obtained. According to the principals (or administrators) of the summer program, 33% of the schools had summer enrollments of 50-99 students. Thirty percent had enrollments of 100-199 students, 22% had less than 50 students, 7% had 200-299, and 7% had 300 or more.

All but one of the 27 schools had a shorter summer school day than the regular school year day. (The remaining school had the same length day.) Forty-eight percent of the schools had a six week summer program, 30% had a five week summer program, 18% had a four week program, and 4% had an eight week program.

The principals also estimated what percent of the students in the summer program came from culturally, linguistically, and/or economically deprived backgrounds. Seven schools responded 11-50%, five schools did not respond, four schools answered between 91-100%, four schools between 51-90%, four schools between 1-10%, two schools answered "none," and one did not know.

The basis for determining pupil participation in the summer reading program, according to principals was: 24% depressed reading levels, 24% teacher (or staff) recommendation, 21% parent request, 10% all students participating in the summer program, 9% membership in one or more target groups (i.e., migrants, etc.), 6% volunteer, 4% other, and 2% did not respond.

In 85% of the schools, the compensatory reading instruction in the summer program was funded totally or in part by funds supplementary to the regular on-going school budget. The category of level of funding most frequently checked was total funding by ESEA Title I, followed by partial funding at the local level, partial funding at the state level, and partial funding by ESEA Title I. Forty-six percent of the schools are funded totally or partially by ESEA Title I.

In response to the question, "What are the total funds allocated for compensatory reading in your summer program?", 59% of the principals (or administrators of a summer study) replied that they did not know or did not respond. For those who did answer the question, the range of the funds was from $2,200-$613,917. The median funding was $11,548, and the mean was $71,208.

Similarly, 59% of the responses to per pupil expenditure and cost per pupil of compensatory reading in the summer program were don't knows or no response. Of the remaining responses: (1) Cost per pupil in the summer program ranged from $24-$475, the median cost was $100, and the mean cost was $126. (2) Cost per compensatory reading pupil in the summer program ranged from $10-$350, the median cost was $62, and the mean cost was $97.

Sixty-two percent of the teachers in the summer programs taught during the regular year at the school which presented the summer program. Thirty-five percent were regular school teachers from another school. One percent responded "summer employee only," and 1% responded "other."

The major classroom approach to reading used by the teachers was a combination of linguistic-phonetic and language experience (63%). Use of solely linguistic-phonetic approach (11%), and of an eclectic approach (11%) followed. Nine percent of the teachers used language experience approach and 6% checked the "other" category.

In response to what the teachers thought were the most outstanding features of their summer program, 17% had an individualized program. The next highest response (15%) was that the teachers met with small groups and could work with the students on a one-to-one basis. Using a particular approach (such as language experience, a diagnostic approach, integration of reading into the language arts) was the third most frequent response (15%). Two responses were mentioned as the fourth highest frequenty (9% each); having a variety of good materials, and having a relaxed, flexible, unstructured atmosphere.

Other responses mentioned, in descending order of frequency, were: making reading fun and enjoyable (5%), student choice in aspects of the program (4%), having high interest reading books (3%), having well-trained teachers and good administration (3%), not giving grades (3%), the use of learning games (3%), having a variety of activities and experiences (2%), improving self-image of the student (2%), student cooperation (2%), developing a better attitude toward reading (2%), relating reading to the real world (1%), having a variety of approaches (1%), and increasing vocabulary (1%). Four percent of the teachers did not respond to this question.

Differences between summer reading programs and reading programs during the regular school year. Several of the questionnaire items dealt with the differences, noted by teachers and principals, between aspects of summer reading programs and regular school year reading programs.

When answering how the instruction during the summer program differed from that during the regular year, the teachers most frequently responded that, in the summer, they worked with smaller groups of students (21%) and used more individualized instruction (22%). The next most frequent response concerned the emphasis of the summer program. Several teachers (9%) reported that skills such as comprehension, word attack, story sequence, were emphasized more in the summer than during the regular year. Others (6%) noted that there was more emphasis on activities, projects, and games during the summer. Other differences noted in the summer program, in descending order of frequency of response, were: no basic or basal text was used (7%), less structure (6%), more student choice in instruction (3%), more intense instruction (3%), more emphasis on reading (2%), slower rate of instruction (2%), reading for enjoyment (2%), team teaching used (2%), more supervision and instruction needed (2%), easier materials used (1%), no grades given (1%), and changing the students' self-image (1%).

Administrators or principals also responded to the question, "How does the summer program differ from the regular year with respect to student population, location, instructional organization, staff, philosophy (goals) and instruction?" The two most frequent responses were that there were fewer students in the summer (50%), and that the summer students were either remedial students, students which needed special help, or only Title I eligible students (33%). Other responses given were: the students came from all parts of town (10%), students were not required to attend summer school (3%), and the students were the same as the regular year students (3%). Three percent did not respond.

With respect to the location of the summer program, the administrators reported that the summer program was held either in the school building which was used throughout the school year (48%), or at another building(s) with a centralized position in their community (48%).

Responses to how instructional organization in the summer differed from the regular year centered around the grouping of students.

The most frequent response to this item was that the grouping or instructional organization was more flexible in the summer than during the regular year (26%). Other responses, in descending order of frequency, were: students were grouped by grade level (19%), students were placed in smaller groups than during the regular school year (15%), students were in an ungraded situation, unlike the regular year (15%), students were grouped by ability (11%), students were grouped by age (7%), and students were grouped by needs (4%).

According to administrators, the main ways in which the summer staff of a school's program differed from the regular staff were that only specific area/subject teachers (i.e., reading, math) taught in the summer (24%), or that the teaching staff was chosen from all the teachers in the district (19%). Another frequent response was that the teaching staff for the summer and the regular year was the same (19%). Other responses were that the summer staff was smaller (14%), more specially trained (10%), more experienced (10%), and was made up of volunteers (4%).

Regarding the philosophy or goals of the summer program differing from those of the regular year, the two most frequent responses were that the summer program was more concerned with remediation (38%) and enrichment (31%). Other responses, in descending order of frequency, were: the maintenance of skills (13%), developing good attitudes (10%), and catching the students up to grade level (7%).

With respect to instruction, the responses showed that the summer programs are more individualized (34%), more flexible (22%), have small skill groups (19%), and use more and different materials (16%) than during the regular school year.

Comparison of Title I and Non-Title I summer study schools. Principals and teachers of schools in the summer study responded to questionnaire items regarding classroom emphases in reading instruction, length of the summer program, estimated proportions of summer students in various ethnic categories, teacher attitude toward the school administration, teacher attitude toward the academic capabilities of disadvantaged children, and source of funding for the

summer school program. Analyses of variance were performed, comparing the schools whose summer programs were funded by Title I to those which were not. The school mean was the unit of analysis. Table 30 shows the results.

Examination of Table 30 shows only one significant difference between Title I and Non-Title I funded summer programs, with respect to time spent improving motor abilities related to reading.

Table 30

Comparisons Between Title I and Non-Title I Funded Summer Programs

Variable	t	D.F.	Direction of Difference
Time spent by a typical summer reading class pupil in:			
Improving motor abilities related to reading	3.1	21	T > NT
Increasing attention span	NS	21	
Developing visual discrimination	NS	21	
Matching letters or words	NS	21	
Learning letter forms	NS	21	
Developing a sight vocabulary	NS	21	
Learning word meanings	NS	21	
Phonic and/or structural analysis	NS	21	
Length of summer program	NS		
Percentage of summer program students who are Caucasian or White	NS	22	
Teacher attitude toward administration	NS	21	
Teacher attitude toward academic capabilities of disadvantaged children	NS	21	

Characteristics of summer program students. It was of interest to describe students who attended summer reading programs with respect to their ethnicity, sex, socioeconomic status, and previous experience in compensatory reading programs, and to compare them in these respects to other CR and NCR students in their own schools. Table 31 shows these data.

Looking first at the characteristics of summer students, they are seen to be predominantly Caucasian or white, and of relatively high socioeconomic status. They are approximately evenly divided with respect to sex and previous CR experience. Compared to regular year CR and NCR students, the summer student population proportions for many categories fall between those of CR and NCR. Thus it seems that the most extreme within group differences during the regular year, whether they be in CR or NCR groups, are moderated in the summer program student population.

Achievement test results. As mentioned previously, students were tested once, during the next-to-last week of each summer school. Only those students who had participated in the 1972-1973 test administrations were tested. The same test battery administered in Fall 1972 was used, in order to avoid administering the same test forms in successive (Spring-Summer) administrations. Because summer school program enrollments were, of course, considerably smaller than those of the regular school year, and because the analysis presented is restricted to those students having both Spring and Summer achievement data, the number of usable cases is very small. Table 32 shows Fall 1972, Spring 1973, and Summer 1973 data for students in summer programs of all the 25 schools which produced usable achievement data.

Examination of Table 32 shows the differences between Spring and Summer means for all tests at all grade levels to be small compared to the corresponding Fall-Spring differences. None of the Spring-Summer differences was statistically significant. It should be noted that the Fall 1972 and Summer 1973 data reported in Table 32 are derived from identical test forms, but that the Spring 1973 data are derived from parallel forms. Although corresponding raw scores of

Table 31

Characteristics of Summer, Regular Year CR and NCR Students, all in Summer Study Schools

	Summer Students		Regular Year CR		Regular Year NCR	
Ethnicity	N	%	N	%	N	%
Caucasian or white	231	80.8	990	63.3	2374	88.5
Negro or black	34	11.9	409	26.2	225	8.4
Spanish surnamed	13	4.5	154	9.8	51	1.9
Oriental	2	0.7	0	0.0	18	0.7
American Indian	3	1.0	9	0.6	10	0.4
Other	3	1.0	2	0.1	5	0.2
Sex						
Male	154	52.6	941	56.9	1401	48.7
Female	139	47.4	714	43.1	1476	51.3
Socio-Economic Status*						
Low	100	35.1	768	49.5	712	27.0
High	185	64.9	774	49.9	1915	72.6
Unclassified	0	0.0	10	0.6	10	0.4
Previous CR Experience						
Yes	136	47.9	956	61.8	358	13.3
No	138	48.6	509	32.9	2201	82.1
Unclassifiable	10	3.5	82	5.3	123	4.6

*As indicated by participation/non-participation in federal school lunch program

Table 32

Summer Study Achievement Data

Grade 2

Test	Fall 1972 N	Fall 1972 Raw Score Mean	Fall 1972 Raw Score S.D.	Spring 1973 N	Spring 1973 Raw Score Mean	Spring 1973 Raw Score S.D.	Summer 1973 N	Summer 1973 Raw Score Mean	Summer 1973 Raw Score S.D.
MAT Word Knowledge	136	22.9	7.2	147	29.6	6.2	150	29.5	6.5
MAT Sentences	134	7.3	3.1	146	10.8	2.7	150	10.2	3.1
MAT Stories	134	11.7	6.0	146	20.4	6.7	150	19.4	7.7
MAT Reading	134	19.0	8.6	146	31.1	8.8	150	29.6	10.2
MAT Total	134	41.8	14.8	146	60.6	14.4	150	59.1	15.6
Cooperative Rdg.	137	20.9	8.6	147	30.8	8.6	150	31.0	9.9
MAT Total + Coop.	134	62.7	21.8	146	91.3	21.8	150	90.0	24.5
Grade 4									
MAT Word Knowledge	77	24.4	10.8	83	31.2	9.9	82	31.2	10.1
MAT Reading	77	19.0	7.9	82	24.2	8.4	83	23.0	8.4
MAT Total	77	43.3	17.7	82	55.3	17.6	82	54.2	17.5
Cooperative Rdg.	77	29.0	8.5	83	37.1	7.1	84	34.6	7.6
MAT Total + Coop.	77	72.4	25.4	82	92.4	23.7	82	88.8	24.2
Grade 6									
MAT Word Knowledge	57	35.2	9.5	58	38.9	9.1	58	38.7	9.6
MAT Reading	57	26.2	9.3	58	29.5	8.8	58	28.2	9.6
MAT Total	57	61.5	17.7	58	68.4	16.6	58	67.0	18.3
STEP Reading	57	29.6	10.9	59	33.7	9.7	58	34.2	10.4
MAT Total + STEP	57	91.1	27.5	57	102.3	24.5	57	101.0	28.0

parallel test forms are not necessarily equivalent, investigation shows negligible differences between the raw score scales of the parallel test forms reported in Table 32. In the only instance where raw score differences between parallel forms amounted to more than one raw score point in any part of the score range (grade 4, Cooperative Reading), the differences served to make the non-significant Spring-Summer difference look larger than it really was, and thus did not affect the above conclusions. From the data of this study, it is impossible to decide whether the summer programs investigated produced negligible effects on student achievement, or were successful in counteracting achievement losses possibly typical of the summer recess. In order to test these hypotheses, summer achievement scores would have to be obtained for students not attending summer programs, a procedure which was judged infeasible for this study.

It was also of interest to compare summer students to other regular year CR and NCR students, for Title I and non-Title I schools, in terms of Fall 1972 and Spring 1973 data. Two-way analyses of variance (student group x funding category) were performed separately by grade, test, and test administration. The unit of analysis was the school, and the data were for students in the summer study schools only. The following student group comparisons were tested jointly:

1. summer students vs. other regular year CR students
2. summer students vs. other regular year NCR students

Students were also classified by the funding category of their school; summer students by the summer classification, and regular year students by the regular year classification. The following funding category comparisons were tested jointly:

1. Title I vs. Non-Title I
2. Title I vs. the average of Non-Title I and Unclassifiable

Table 33 shows the results of the analyses.

Reference to Table 33 reveals that none of the Funding x Student Group interactions was significant. It is therefore appropriate to interpret all significant main effects. Looking first at the "Student Group" comparisons in grade 2, it is of interest to note that for Cooperative Primary Reading, MAT Word Knowledge, and MAT Total, summer students exceed CR students for the Fall data, but have fallen behind them by the Spring administration. This suggests that lack of progress in these skills in the second grade may be one reason for student participation in summer programs. For pretest and posttest achievement scores in grades 4 and 6, all summer student means exceed those for regular year CR students and most are smaller than those of regular year NCR students.

Funding category significant achievement main effects are less frequent than are those for Student Group, and account for considerably smaller proportions of criterion variance where they do occur. Their direction is completely consistent across tests, administrations, and grade levels, with students in non-Title I schools exceeding those in Title I schools, and the average of non-Title I and unclassifiable schools exceeding Title I schools.

With respect to attitude toward reading scores, significant effects in grades 4 and 6 were predominantly in the same direction, with summer student scores exceeding those of both CR and NCR students. This is somewhat different from the most common achievement test result, where summer student scores fell between those of CR and NCR students.

Analyses parallel to those described above were performed, but comparing summer students to other regular year CR and NCR students in all the Phase II schools. Table 34 shows the results.

Table 33

Student Group x Funding Category Differences in Summer Study Schools: Fall 1972 and Spring 1973 Data

Grade 2

		Fall 1972								
						Raw Score Means[7]				
Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Coop. Primary Reading	NS	(2,62)			21.6	23.9	24.6	10.6	-0.22	-0.28
Student Group		17.1[3]	(2,62)	S > CR S < NCR	.36	20.1	19.4	29.1		0.07	-0.85
F x SG		NS	(4,58)								
Funding	MAT Word Knowledge	4.0[1]	(2,62)	NT > T NT/DK > T	.11	23.7	25.3	27.3	8.2	-0.19	-0.44
Student Group		23.5[3]	(2,62)	S > CR S < NCR	.43	22.8	22.3	29.7		0.06	-0.84
F x SG		NS	(4,58)								
Funding	MAT Sentences	3.4[1]	(2,62)	NT > T NT/DK > T	.10	7.6	8.5	9.0	3.6	-0.25	-0.39
Student Group		20.6[3]	(2,62)	S > CR S < NCR	.40	7.2	6.9	10.2		0.08	-0.83
F x SG		NS	(4,58)								
Funding	MAT Stories	NS	(2,62)			13.1	14.2	15.7	8.0	-0.14	-0.32
Student Group		22.8[3]	(2,62)	S < CR S < NCR	.42	11.3	11.7	19.1		0.05	-0.97
F x SG		NS	(4,58)								
Funding	MAT Reading	NS	(2,62)			20.7	22.7	24.7	11.0	-0.18	-0.36
Student Group		23.6[3]	(2,62)	S < CR S < NCR	.43	18.5	18.6	29.3		-0.01	-0.98
F x SG		NS	(4,58)								
Funding	MAT Total	3.5[1]	(2,62)	NT > T NT/DK > T	.10	44.4	48.0	52.1	18.1	-0.20	-0.42
Student Group		26.8[3]	(2,62)	S > CR S < NCR	.46	41.4	41.0	59.0		0.02	-0.97
F x SG		NS	(4,58)								
Funding	Coop. + MAT Total	NS	(2,62)			66.1	72.3	76.7	27.5	-0.22	-0.38
Student Group		23.6[3]	(2,62)	S > CR S < NCR	.43	61.6	60.3	88.1		0.05	-0.96
F x SG		NS	(4,58)								

Table 33 (cont.)

Grade 2

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Spring 1973 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Coop. Primary Reading	5.8[2]	(2,62)	NT > T NT/DK > T	.16	32.0	35.2	36.4	9.9	-0.32	-0.44
Student Group		28.9[3]	(2,62)	S < CR S < NCR	.48	29.9	30.9	40.2		-0.10	-1.03
F x SG		NS	(4,58)								
Funding	MAT Word Knowledge	5.8[2]	(2,62)	NT > T NT/DK > T	.16	30.0	32.8	32.1	5.7	-0.49	-0.37
Student Group		10.8[3]	(2,62)	S < CR S < NCR	.26	29.7	29.8	33.4		-0.02	-0.65
F x SG		NS	(4,58)								
Funding	MAT Sentences	5.3[2]	(2,62)	NT > T NT/DK > T	.15	10.9	12.0	11.8	2.5	-0.44	-0.76
Student Group		11.3[3]	(2,62)	S = CR S < NCR	.27	10.8	10.8	12.4		0.00	-0.64
F x SG		NS	(4,58)								
Funding	MAT Stories	5.6[2]	(2,62)	NT > T NT/DK > T	.15	21.0	24.1	23.9	6.9	-0.45	-0.42
Student Group		16.4[3]	(2,62)	S = CR S < NCR	.35	20.3	20.3	25.9		0.00	-0.81
F x SG		NS	(4,58)								
Funding	MAT Reading	6.0[2]	(2,62)	NT > T NT/DK > T	.16	31.9	36.1	35.7	9.0	-0.47	-0.42
Student Group		16.2[3]	(2,62)	S = CR S < NCR	.34	31.1	31.1	38.3		0.00	-0.80
F x SG		NS	(4,58)								
Funding	MAT Total	6.2[2]	(2,62)	NT > T NT/DK > T	.17	61.9	68.9	67.8	14.1	-0.57	-0.42
Student Group		14.6[3]	(2,62)	S < CR S < NCR	.32	60.8	61.0	71.6		-0.01	-0.77
F x SG		NS	(4,58)								
Funding	Coop. + MAT Total	6.6[2]	(2,62)	NT > T NT/DK > T	.18	93.9	104.1	104.2	23.1	-0.44	-0.45
Student Group		21.9[3]	(2,62)	S < CR S < NCR	.41	90.7	91.9	111.9		-0.05	-0.92
F x SG		NS	(4,58)								

Table 33 (cont.)

Grade 2

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Fall 1972 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Attitude	NS	(2,62)			2.5	2.6	2.6	1.3	-0.08	-0.08
Student Group		NS	(2,62)			2.5	2.4	2.7		-0.08	-0.15
F x SG		NS	(4,58)								
Grade 4											
Funding	Coop. Primary Reading	3.6[1]	(2,49)	NT > T NT/DK > T	.13	29.4	30.0	35.4	9.5	-0.06	-0.63
Student Group		22.1[3]	(2,49)	S > CR S < NCR	.47	28.3	27.0	37.8		0.14	-1.00
F x SG		NS	(4,45)								
Funding	MAT Word Knowledge	NS	(2,49)			25.1	28.6	33.5	12.5	-0.28	-0.67
Student Group		22.9[3]	(2,49)	S > CR S < NCR	.48	24.4	22.7	36.5		0.14	-0.97
F x SG		NS	(4,45)								
Funding	MAT Reading	4.2[1]	(2,49)	NT > T NT/DK > T	.15	19.9	20.6	25.8	9.8	-0.07	-0.60
Student Group		30.5[3]	(2,49)	S > CR S < NCR	.55	18.2	17.7	28.6		0.05	-1.06
F x SG		NS	(4,45)								
Funding	MAT Total	5.4[2]	(2,49)	NT > T NT/DK > T	.18	45.0	49.2	59.3	21.5	-0.19	-0.66
Student Group		27.5[3]	(2,49)	S > CR S < NCR	.53	42.6	40.4	65.1		0.10	-1.05
F x SG		NS	(4,45)								
Funding	Coop. + MAT Total	4.8[2]	(2,49)	NT > T NT/DK > T	.16	74.4	79.2	94.8	30.2	-0.16	-0.67
Student Group		26.3[3]	(2,49)	S > CR S < NCR	.52	70.9	67.4	103.0		0.12	-1.06
F x SG		NS	(4,45)								
Funding	Attitude	NS[	(2,49)			-0.69	-0.42	-0.96	1.2	-0.22	0.22
Student Group		21.7[3]	(2,49)	S > CR S > NCR	.47	-0.33	-0.57	-1.25		0.20	0.77
F x SG		NS	(4,45)								

Table 33 (cont.)

Grade 2

Comparisons[4]	Variable	Spring 1973 F[5]	D.F.	Direction of Difference[6]	Prop. Var.Explained by Compar.	Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Attitude	NS	(2,62)			2.7	2.7	2.5	1.3	0.00	0.15
Student Group		NS	(2,62)			2.8	2.4	2.7		0.31	0.08
F x SG		NS	(4,58)								
Grade 4											
Funding	Coop. Primary Reading	8.0[3]	(2,49)	NT > T NT/DK > T	.25	36.0	40.2	41.0	8.2	-0.51	-0.61
Student Group		22.0[3]	(2,49)	S > CR S < NCR	.47	37.2	34.1	42.6		0.38	-0.66
F x SG		NS	(4,45)								
Funding	MAT Word Knowledge	4.8[2]	(2,49)	NT > T NT/DK > T	.16	31.1	34.7	38.1	11.3	-0.32	-0.62
Student Group		20.2[3]	(2,49)	S > CR S < NCR	.45	31.1	28.5	40.9		0.23	0.87
F x SG		NS	(4,45)								
Funding	MAT Reading	8.7[3]	(2,49)	NT > T NT/DK > T	.26	23.8	28.1	30.7	9.8	-0.44	-0.70
Student Group		26.7[3]	(2,49)	S > CR S < NCR	.52	23.7	22.0	33.0		0.17	-0.95
F x SG		NS	(4,45)								
Funding	MAT Total	6.6[2]	(2,49)	NT > T NT/DK > T	.21	54.8	62.8	68.7	20.4	-0.39	-0.68
Student Group		24.3[3]	(2,49)	S > CR S < NCR	.50	54.6	50.5	74.0		0.20	-0.95
F x SG		NS	(4,45)								
Funding	Coop. + MAT Total	7.2[2]	(2,49)	NT > T NT/DK > T	.23	90.8	103.0	109.8	27.9	-0.44	-0.69
Student Group		24.4[3]	(2,49)	S > CR S < NCR	.50	91.8	84.5	116.7		0.26	-0.89
F x SG		NS	(4,45)								
Funding	Attitude	3.2[1]	(2,49)	NT > T T > NT/DK	.11	-0.74	-0.33	-1.23	1.3	-0.31	0.38
Student Group		10.0[3]	(2,49)	S > CR S > NCR	.29	-0.44	-0.61	-1.36		0.13	0.71
F x SG		NS	(4,45)								

Table 33 (cont.)

Grade 6

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Fall 1972 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	STEP II Reading	NS	(2,39)			33.0	35.3	35.6	12.4	-0.18	-0.21
Student Group		17.5[3]	(2,39)	S > CR S < NCR	.47	30.8	29.1	41.0		0.14	-0.82
F x SG		NS	(4,35)								
Funding	MAT Word Knowledge	NS	(2,39)			37.1	39.3	39.6	10.6	-0.21	-0.33
Student Group		12.9[3]	(2,39)	S > CR S < NCR	.40	36.0	34.5	43.1		0.14	-0.67
F x SG		NS	(4,35)								
Funding	MAT Reading	NS	(2,39)			28.5	30.1	31.8	9.9	-0.16	-0.33
Student Group		11.4[3]	(2,39)	S > CR S < NCR	.37	26.7	26.5	34.6		0.02	-0.80
F x SG		NS	(4,35)								
Funding	MAT Total	NS	(2,39)			65.6	69.4	71.4	19.6	-0.19	-0.30
Student Group		12.5[3]	(2,39)	S > CR S < NCR	.39	62.7	61.0	77.6		0.09	-0.76
F x SG		NS	(4,35)								
Funding	STEP + MAT Total	NS	(2,39)			98.6	104.7	107.0	31.0		
Student Group		15.2[3]	(2,39)	S > CR S < NCR	.44	93.5	90.2	118.6			
F x SG		NS	(4,35)								
Funding	Attitude	NS	(2,39)			-0.87	-0.75	-1.01	1.3		
Student Group		4.3[2]	(2,39)	S < CR S > NCR	.20	-0.63	-0.59	-1.30			
F x SG		NS	(4,35)								

Table 33 (cont.)

Grade 6

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Spring 1973 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	STEP II Reading	NS	(2,39)			35.7	39.4	38.6	11.9	-0.31	-0.24
Student Group		10.3[3]	(2,39)	S > CR S < NCR	.35	35.4	32.7	42.7		0.23	-0.61
F x SG		NS	(4,35)								
Funding	MAT Word Knowledge	NS	(2,39)			40.0	43.3	41.9	9.4	-0.35	-0.20
Student Group		9.0[3]	(2,39)	S > CR S < NCR	.32	40.7	37.5	44.8		0.34	-0.44
F x SG		NS	(4,35)								
Funding	MAT Reading	5.0[2]	(2,39)	NT > T NT/DK > T	.20	30.8	35.8	32.9	9.3	-0.54	-0.23
Student Group		8.7[3]	(2,39)	S > CR S < NCR	.31	31.8	29.2	35.9		0.28	-0.44
F x SG		NS	(4,35)								
Funding	MAT Total	3.6[2]	(2,39)	NT > T NT/DK > T	.15	70.9	79.1	74.8	17.9	-0.45	-0.22
Student Group		9.2[3]	(2,39)	S > CR S < NCR	.32	72.4	66.8	80.7		0.31	-0.46
F x SG		NS	(4,35)								
Funding	STEP + MAT Total	3.5[1]	(2,39)	NT > T NT/DK > T	.15	106.6	119.3	113.6	28.7	-0.44	-0.24
Student Group		10.2[3]	(2,39)	S > CR S < NCR	.34	108.4	99.7	123.4		0.30	-0.52
F x SG		NS	(4,35)								
Funding	Attitude	NS	(2,39)			-0.80	-0.74	-0.76	1.3	-0.46	-0.31
Student Group		6.3[2]	(2,39)	S > CR S > NCR	.24	-0.41	-0.53	-1.25		0.09	0.62
F x SG		NS	(4,35)								

[1]Significant at .05 level [2]Significant at .01 level [3]Significant at .001 level

[4]The comparisons indicated are those described in the preceding text (two funding comparisons and two student group comparisons)

Table 33 (cont.)

[5]The F values given are for the joint test of the two funding comparisons or the two student group comparisons.

[6]
S = summer students
CR = other regular year compensatory reading students in summer study schools
NCR = other regular year non-compensatory reading students in summer study schools
T = students in Title I funded schools
NT = students in non-Title I funded schools
NT/DK = average of non-Title I funded and "don't know" (unclassifiable) schools

[7]In each of the "Funding" rows, raw score means 1, 2, and 3 correspond to Title I, non-Title I, and Unclassifiable groups, respectively.
In each of the "Student Group" rows, raw score means 1, 2, and 3 correspond to Summer, CR, and NCR students, respectively.

Table 34

Student Group x Funding Category Differences in The Phase II Schools: Fall 1972 and Spring 1973 Data

Grade 2

		Fall 1972									
Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Coop. Primary Reading	6.6[2]	(2,378)	NT > T NT/DK > T	.03	22.9	25.6	24.7	10.6	-0.25	-0.17
Student Group		140.6[3]	(2,378)	S > CR S < NCR	.43	20.1	19.7	29.0		0.04	-0.84
F x SG[8]		2.4[1]	(4,374)		.03						
Funding	MAT Word Knowledge	10.0[3]	(2,378)	NT > T NT/DK > T	.05	23.7	26.3	25.7	8.2	-0.32	-0.24
Student Group		107.4[3]	(2,378)	S > CR S < NCR	.36	22.8	21.5	28.6		0.16	-0.71
F x SG		NS	(4,374)								
Funding	MAT Sentences	6.9[3]	(2,378)	NT > T NT/DK > T	.03	7.9	8.7	8.5	3.6	-0.22	-0.17
Student Group		150.8[3]	(2,378)	S > CR S < NCR	.44	7.2	6.8	9.9		0.11	-0.75
F x SG		NS	(4,374)								
Funding	MAT Stories	6.5[2]	(2,378)	NT > T NT/DK > T	.03	14.1	15.7	15.6	8.0	-0.20	-0.19
Student Group		151.2[3]	(2,378)	S < CR S < NCR	.44	11.3	11.7	18.7		0.05	-0.92
F x SG		NS	(4,374)								
Funding	MAT Reading	7.0[3]	(2,378)	NT > T NT/DK > T	.04	21.9	24.5	24.1	11.0	-0.24	-0.20
Student Group		159.1[3]	(2,378)	S = CR S < NCR	.46	18.5	18.5	28.6		0.00	-0.92
F x SG		NS	(4,374)								
Funding	MAT Total	8.9[3]	(2,378)	NT > T NT/DK > T	.04	45.7	50.8	49.8	18.1	-0.28	-0.23
Student Group		145.4[3]	(2,378)	S > CR S < NCR	.43	41.4	40.1	57.2		0.07	-0.87
F x SG		NS	(4,374)								
Funding	Coop. + MAT Total	8.3[3]	(2,378)	NT > T NT/DK > T	.04	68.7	76.5	74.5	27.5	-0.28	-0.21
Student Group		149.9[3]	(2,378)	S > CR S < NCR	.44	61.6	59.8	86.1		0.07	-0.89
F x SG		NS	(4,374)								

Table 34 (cont.)

Grade 2

Spring 1973

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Coop. Primary Reading	4.9[2]	(2,269)	NT > T NT/DK > T	.04	34.0	36.4	36.0	9.9	-0.24	-0.20
Student Group		105.8[3]	(2,269)	S < CR S < NCR	.44	29.9	31.2	39.9		0.13	-1.01
F x SG		NS	(4,265)								
Funding	MAT Word Knowledge	8.3[3]	(2,269)	NT > T NT/DK > T	.06	30.6	32.4	31.9	5.7	-0.32	-0.23
Student Group		45.6[3]	(2,269)	S < CR S < NCR	.25	29.7	29.8	33.1		-0.02	-0.60
F x SG		NS	(4,256)								
Funding	MAT Sentences	4.8[2]	(2,269)	NT > T NT/DK > T	.03	11.2	11.8	11.7	2.5	-0.24	-0.21
Student Group		47.0[3]	(2,269)	S = CR S < NCR	.26	10.8	10.8	12.3		0.00	-0.60
F x SG		NS	(4,265)								
Funding	MAT Stories	5.0[2]	(2,269)	NT > T NT/DK > T	.04	21.9	23.7	23.1	6.9	-0.26	-0.17
Student Group		77.0[3]	(2,269)	S > CR S < NCR	.36	20.3	20.0	25.5		0.04	-0.75
F x SG[8]		2.9[1]	(4,265)		.04						
Funding	MAT Reading	5.1[2]	(2,269)	NT > T NT/DK > T	.04	33.1	35.5	34.7	9.0	-0.27	-0.18
Student Group		71.4[3]	(2.269)	S > CR S < NCR	.35	31.1	30.8	37.8		0.03	-0.97
F x SG[8]		2.6[1]	(4,265)		.04						
Funding	MAT Total	6.4[2]	(2,269)	NT > T NT/DK > T	.05	63.7	67.9	66.7	14.1	-0.30	-0.21
Student Group		64.0[3]	(2,269)	S > CR S < NCR	.32	60.8	60.7	70.9		0.01	0.72
F x SG		NS	(4,265)								
Funding	Coop. + MAT Total	6.2[3]	(2,269)	NT > T NT/DK > T	.04	97.7	104.2	102.7	23.1	-0.28	-0.22
Student Group		84.3[3]	(2,269)	S < CR S < NCR	.39	90.7	91.9	110.9		-0.05	-0.87
F x SG		NS	(4,265)								

Table 34 (cont.)

Grade 2

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Fall 1972 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Attitude	NS	(2,371)			2.42	2.57	2.50	1.3	-0.15	-0.08
Student Group		9.9[3]	(2,371)	S > CR S < NCR	.05	2.52	2.34	2.61		0.15	-0.08
F x SG		NS	(4,367)								
Grade 4											
Funding	Coop. Primary Reading	6.2[2]	(2,340)	NT > T NT/DK > T	.04	30.7	32.8	32.6	9.5	-0.22	-0.20
Student Group		207.6[3]	(2,340)	S > CR S < NCR	.55	28.3	27.0	37.0		0.14	-0.92
F x SG		NS	(4,336)								
Funding	MAT Word Knowledge	8.4[3]	(2,340)	NT > T NT/DK > T	.05	26.4	29.8	29.3	12.5	-0.27	-0.23
Student Group		199.4[3]	(2,340)	S > CR S < NCR	.54	24.4	21.5	35.1		0.23	-0.86
F x SG		NS	(4,336)								
Funding	MAT Reading	6.6[2]	(2,340)	NT > T NT/DK > T	.04	20.9	22.9	22.8	9.8	-0.20	-0.19
Student Group		220.4[3]	(2,340)	S > CR S < NCR	.56	18.2	17.3	27.2		-0.09	-0.92
F x SG		NS	(4,336)								
Funding	MAT Total	7.8[3]	(2,340)	NT > T NT/DK > T	.04	47.3	52.8	52.1	21.5	-0.26	-0.22
Student Group		216.0[3]	(2,340)	S > CR S < NCR	.56	42.6	38.8	62.3		0.18	-0.92
F x SG		NS	(4,336)								
Funding	Coop. + MAT Total	7.5[3]	(2,340)	NT > T NT/DK > T	.04	78.0	85.5	84.8	30.2	-0.25	-0.23
Student Group		219.7[3]	(2,340)	S > CR S < NCR	.56	70.9	65.9	99.3		0.17	-0.94
F x SG		NS	(4,336)								
Funding	Attitude	NS	(2,337)			-0.76	-0.78	-0.85	1.2	0.02	0.07
Student Group		146.9[3]	(2,337)	S > CR S > NCR	.47	-0.33	-0.45	-1.22		0.10	0.74
F x SG		NS	(4,333)								

Table 34 (cont.)

Grade 2

Spring 1973

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	Attitude	NS	(2,266)			2.66	2.61	2.61	1.3	-0.04	-0.04
Student Group		3.9[1]	(2,266)	S > CR S > NCR	.03	2.76	2.55	2.70		-0.16	-0.05
F x SG		NS	(4,262)								
Grade 4											
Funding	Coop. Primary Reading	4.5[2]	(2,256)	NT > T NT/DK > T	.03	36.9	38.8	38.7	8.2	-0.23	-0.22
Student Group		112.4[3]	(2,256)	S > CR S < NCR	.47	37.2	34.1	41.7		-0.38	-0.55
F x SG		NS	(4,252)								
Funding	MAT Word Knowledge	4.3[1]	(2,256)	NT > T NT/DK > T	.03	32.8	35.2	35.4	11.3	-0.21	-0.23
Student Group		124.5[3]	(2,256)	S > CR S < NCR	.49	31.1	28.6	40.0		-0.22	-0.79
F x SG		NS	(4,252)								
Funding	MAT Reading	4.7[2]	(2,256)	NT > T NT/DK > T	.04	25.9	28.0	28.0	9.8	-0.21	-0.21
Student Group		138.4[3]	(2,256)	S > CR S < NCR	.52	23.7	22.3	32.1		0.14	-0.86
F x SG		NS	(4,252)								
Funding	MAT Total	4.6[2]	(2,256)	NT > T NT/DK > T	.03	58.6	63.2	63.4	20.4	-0.23	-0.24
Student Group		134.5[3]	(2,256)	S > CR S < NCR	.51	54.6	50.9	72.2		0.18	-0.86
F x SG		NS	(4,252)								
Funding	Coop. + MAT Total	4.8[2]	(2,256)	NT > T NT/DK > T	.04	95.6	102.0	102.1	27.9	-0.23	-0.23
Student Group		131.0[3]	(2,256)	S > CR S < NCR	.51	91.8	84.9	113.9		0.25	-0.79
F x SG		NS	(4,252)								
Funding	Attitude	NS	(2,256)			-0.92	-0.88	-1.09	1.3	-0.03	0.13
Student Group		110.8[3]	(2,256)	S > CR S > NCR	.46	-0.44	-0.62	-1.41		-0.14	0.75
F x SG[8]		4.7[3]	(4,252)		.07						

Table 34 (cont.)

Grade 6

Comparisons[4]	Variable	F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Fall 1972 Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	STEP II Reading	NS	(2,247)			33.3	35.1	35.0	12.4	-0.15	-0.14
Student Group		131.8[3]	(2,247)	S > CR S < NCR	.52	30.8	28.0	40.8		0.23	-0.81
F x SG		NS	(4,243)								
Funding	MAT Word Knowledge	3.7[1]	(2,247)	NT > T NT/DK > T	.03	37.0	38.9	39.1	10.6	-0.18	-0.20
Student Group		91.9[3]	(2,247)	S > CR S < NCR	.43	36.0	33.3	43.0		0.25	-0.66
F x SG		NS	(4,243)								
Funding	MAT Reading	3.3[1]	(2,247)	NT > T NT/DK > T	.03	28.7	30.3	30.5	9.9	-0.16	-0.18
Student Group		118.2[3]	(2,247)	S > CR S < NCR	.49	26.7	24.9	34.6		0.18	-0.80
F x SG		NS	(4,243)								
Funding	MAT Total	3.6[1]	(2,247)	NT > T NT/DK > T	.03	65.6	69.2	69.6	19.6	-0.18	-0.20
Student Group		108.5[3]	(2,247)	S > CR S < NCR	.48	62.7	58.2	77.6		0.23	-0.76
F x SG		NS	(4,243)								
Funding	STEP + MAT Total	3.2[1]	(2,247)	NT > T NT/DK > T	.02	98.9	104.4	104.7	31.0	-0.17	-0.19
Student Group		120.6[3]	(2,247)	S > CR S < NCR	.49	93.5	86.2	118.3		0.24	-0.80
F x SG		NS	(4,243)								
Funding	Attitude	NS	(2,246)			-0.82	-0.86	-0.88	1.3	0.03	0.05
Student Group		81.6[3]	(2,246)	S < CR S > NCR	.40	-0.63	-0.46	-1.26		-0.13	0.48
F x SG		NS	(4,242)								

Table 34 (cont.)

Grade 6

Comparisons[4]	Variable	Spring 1973 F[5]	D.F.	Direction of Difference[6]	Prop. Var. Explained by Compar.	Raw Score Means[7] 1	2	3	Study Sample Raw Score S.D.	1-2 Diff. in S.D. Units	1-3 Diff. in S.D. Units
Funding	STEP II Reading	4.2[2]	(2,246)	NT > T NT/DK > T	.03	36.2	38.5	38.3	11.9	-0.19	-0.18
Student Group		123.7[3]	(2,246)	S > CR S < NCR	.50	35.4	31.6	43.2		0.32	-0.66
F x SG		NS	(4,242)								
Funding	MAT Word Knowledge	NS	(2,246)			39.9	41.4	41.6	9.4	-0.16	-0.18
Student Group		75.6[3]	(2,246)	S > CR S < NCR	.38	40.7	36.9	44.6		0.40	-0.41
F x SG		NS	(4,242)								
Funding	MAT Reading	4.7[2]	(2,246)	NT > T NT/DK > T	.04	31.3	33.5	32.8	9.3	-0.24	-0.16
Student Group		106.1[3]	(2,246)	S > CR S < NCR	.46	31.8	28.1	36.3		0.40	-0.48
F x SG		NS	(4,242)								
Funding	MAT Total	3.6[1]	(2,246)	NT > T NT/DK > T	.03	71.3	75.0	74.4	17.9	-0.21	-0.17
Student Group		94.4[3]	(2,246)	S > CR S < NCR	.43	72.4	65.0	80.9		0.41	-0.47
F x SG		NS	(4,242)								
Funding	STEP + MAT Total	4.1[1]	(2,246)	NT > T NT/DK > T	.03	107.4	113.6	112.8	28.7	-0.22	-0.19
Student Group		109.9[3]	(2,246)	S > CR S < NCR	.47	108.4	96.6	124.1		0.41	-0.55
F x SG		NS	(4,242)								
Funding	Attitude	NS	(2,246)			-0.86	-0.84	-0.85	1.3	-0.02	-0.01
Student Group		84.1[3]	(2,246)	S > CR S > NCR	.41	-0.41	-0.47	-1.28		0.05	0.67
F x SG		NS	(4,242)								

[1] Significant at .05 level [2] Significant at .01 level [3] Significant at .001 level

[4] The comparisons indicated are those described in the preceding text (two funding comparisons and two student group comparisons)

Table 34 (cont.)

[5]The F values given are for the joint test of the two funding comparisons or the two student group comparisons.

[6]
S = summer students
CR = other regular year compensatory reading students in summer study schools
NCR = other regular year non-compensatory reading students in summer study schools
T = students in Title I funded schools
NT = students in non-Title I funded schools
NT/DK = average of non-Title I funded and "don't know" (unclassifiable) schools

[7]In each of the "Funding" rows, raw score means 1, 2, and 3 correspond to Title I, non-Title I, and Unclassifiable groups, respectively.
In each of the "Student Group" rows, raw score means 1, 2, and 3 correspond to Summer, CR, and NCR students, respectively.

[8]See Tables 35-38 for significant interaction means.

A few funding x student group interactions were also significant. As was the case with the significance tests of main effects, the tests of interactions were joint tests. The following four tables show cell means and t values for the four significant interactions appearing in Table 34.

Table 35

Funding x Student Group Interaction: Grade 2, Fall Cooperative Primary Reading

	Summer	CR	NCR	F_1	F_2
Title I	18.8	19.6	27.4	1	1
Non-Title I	23.8	20.2	31.8	-1	-1/2
Unclassifiable	16.0	19.8	30.2		-1/2

SG_1:	SG_1:	1	-1
	SG_2:	1	-1

$F_1 \times SG_1$: t = -1.6
$F_1 \times SG_2$: t = -0.2
$F_2 \times SG_1$: t = -0.2
$F_2 \times SG_2$: t = 0.9
D.F. = 374

Table 35 shows, in addition to the interaction cell means, the definitions of the various funding and student group contrasts (e.g., the first funding contrast, F_1, is defined as Title I vs. Non-Title I; the first Student Group contrast, SG_1, is defined as summer vs. CR students). The relative contributions of the various contrast combinations are reflected in the t values given below the table (note that in Table 34 the joint interaction test was significant even though none of the individual t values was significant). The double lines enclose those means which correspond to the comparisons associated with the highest t value (in this case, $F_1 \times SG_1$). Thus it can be seen that the interaction represented above is caused to a substantial extent by the fact that CR > Summer for Title I schools, but CR < Summer for Non-Title I schools.

Table 36

Funding x Student Group Interaction: Grade 2, Spring MAT Stories

	Summer	CR	NCR
Title I	18.2	19.9	24.9
Non-Title I	24.9	20.4	26.7
Unclassifiable	19.5	20.1	26.1

$F_1 \times SG_1$: t = -3.3
$F_1 \times SG_2$: t = -2.5
$F_2 \times SG_1$: t = -2.0
$F_2 \times SG_2$: t = -1.4
D.F. = 265

Inspection of Table 36 shows that disproportionalities throughout most of the table contribute substantially to the significant interaction. The element of the interaction having the highest t value ($F_1 \times SG_1$) is enclosed in double lines. As was the case with the grade 2 Fall Cooperative Primary Reading data, CR > Summer for Title I schools, but CR < Summer for Non-Title I schools.

Table 37

Funding x Student Group Interaction: Grade 2, Spring MAT Reading

	Summer	CR	NCR
Title I	28.4	30.6	36.9
Non-Title I	37.0	31.3	39.3
Unclassifiable	29.7	31.0	38.5

$F_1 \times SG_1$: t = -3.1
$F_1 \times SG_2$: t = -2.4
$F_2 \times SG_1$: t = -1.8
$F_2 \times SG_2$: t = -1.2
D.F. = 265

Table 37 shows a situation for MAT Reading analogous to the preceding result for MAT Stories.

Table 38

Funding x Student Group Interaction: Grade 4, Spring Attitude Toward Reading

	Summer	CR	NCR
Title I	-0.36	-0.58	-1.38
Non-Title I	-0.15	-0.62	-1.44
Unclassifiable	-1.68	-0.68	-1.43

$F_1 \times SG_1$: t = -1.0
$F_1 \times SG_2$: t = -1.1
$F_2 \times SG_1$: t = 2.1
$F_2 \times SG_2$: t = 2.1
D.F. = 252

The interaction shown in Table 38 is somewhat complex, but it seems that an important contributing element is the extreme divergence of summer student attitudes in Non-Title I and Unclassifiable schools, as contrasted to the similarity of student attitudes in these school funding categories for both CR and NCR students.

Although Spring-Summer achievement differences were negligible for the total group of schools, it was of interest to determine whether achievement differences existed among schools. Table 39 shows the results of analyses of variance performed on Spring (pretest for the summer study) achievement data of summer program students, separately by grade. The dependent variable is Total achievement score, the unit of analysis is the individual student, and the effect tested is differences among schools.

Table 39

Pretest (Spring 1973) Total Reading Achievement Differences Among Schools Offering A Summer 1973 Program

Grade	D.F.	F	Proportion of Variance Explained by Differences Among Schools
2	22,123	4.2[3]	.43
4	16,63	6.0[3]	.60
6	11,44	2.8[2]	.41

[1].05 level

[2].01 level

[3].001 level

Reference to Table 39 shows that significant pretest differences existed among summer study schools at all three grade levels.

Analyses of variance were also performed to assess the pretest (Spring 1973) and posttest (Summer 1973) Total Reading Achievement differences among summer study schools, with the effects of the following funding category contrasts removed:

1. Title I vs. Non-Title I
2. Title I vs. the average of Non-Title I and Unclassifiable schools

The unit of analysis is the individual student. Table 40 shows the results, based on pretest and posttest data for the same student sample.

Examination of Table 40 reveals that, within the various funding source strata, there are significant achievement differences among summer study schools at grades 2 and 6 in terms of Spring achievement data, and at grades 2 and 4 in terms of Summer achievement data.

Table 40

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achievement Differences Among Schools Offering A Summer 1973 Program, With The Effects of Funding Source Removed

Dependent Variable	Grade	D.F.	F	Proportion of Variance Explained By Differences Among Schools
Pretest	2	20;123	2.1[2]	.25
	4	13;57	NS	
	6	9;44	3.0[2]	.38
Posttest	2	20;123	2.6[3]	.30
	4	13;57	2.1[1]	.32
	6	9;44	NS	

[1]significant at .05 level

[2]significant at .01 level

[3]significant at .001 level

Analyses of covariance were performed on Summer (posttest for the summer study) achievement data of summer program students, separately by grade. The dependent variable is Total score, the covariate is Spring Total score, the unit of analysis is the individual student, and the effect tested is differences among schools. Table 41 shows these results, and Table 42 gives the Spring and Summer total achievement means.

Table 41

Total Reading Achievement Gain Among Schools Offering A Summer 1973 Program

Grade	D.F.	F	Proportion of Variance Explained by Differences Among Schools
2	22,122	2.5[3]	.06
4	16,62	1.9[1]	.06
6	11,43	NS	

[1].05 level

[2].01 level

[3].001 level

Table 42

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achievement Means (Summer Program Students Only) for Schools Offering A Summer 1973 Program

	Total Reading Achievement Raw Score Means					
	Grade 2		Grade 4		Grade 6	
School	Spring	Summer	Spring	Summer	Spring	Summer
A	106.2	100.2	83.3	81.8	--	--
B	100.9	100.9	92.2	88.2	115.0	105.8
C	83.5	68.7	67.2	65.0	92.5	94.7
D	108.4	106.9	--	--	--	--
E	89.5	89.1	81.1	77.9	101.0	99.9
F	87.9	89.4	94.8	92.6	--	--
G	111.4	111.1	114.2	108.1	145.5	142.5
H	106.9	107.0	108.3	108.0	--	--
I	88.0	95.3	--	--	--	--
J	68.6	74.6	--	--	--	--
K	100.0	114.0	101.0	95.0	126.0	107.0
L	93.0	83.0	91.7	69.0	112.0	102.5
M	105.2	105.5	99.0	105.3	112.3	104.3
N	87.7	93.3	119.4	117.4	107.9	112.1
O	83.5	78.5	75.0	73.5	--	--
P	97.6	92.8	--	--	--	--
Q	88.6	86.0	97.3	77.7	126.0	122.0
R	83.7	94.0	--	--	--	--
S	106.9	110.7	98.0	103.2	101.8	104.6
T	66.5	67.7	54.4	58.1	--	--
U	77.7	83.2	84.7	86.3	--	--
V	73.4	73.2	--	--	--	--
W	71.0	59.2	--	--	--	--
X	--	--	94.0	86.0	67.6	56.6
Y	--	--	--	--	90.0	101.8
Total	90.7	90.6	91.5	87.8	108.1	104.5

Table 41 shows significant reading achievement gain differences among schools in grades 2 and 4. Individual school effects were examined and ten outlier schools were identified (grade 2: three positive, three negative; grade 4: two positive, two negative) Of the five positive outlier schools, three had Title I funded summer programs, one was non-Title I funded, and one did not respond to that questionnaire item. Of the five negative outlier schools, four had Title I funded summer programs and one was non-Title I funded.

A content analysis of administrator and teacher questionnaires was performed, separately by positive and negative schools, with the following results:

1. positive schools concentrate more on grade 2 programs and less on multiage programs than do negative schools.
2. positive schools have more teachers who teach in another school in the district during the regular school year; negative schools have more teachers who teach in the same school.
3. positive schools have more experienced teachers than do negative schools.
4. teachers in positive schools were more likely to have been assigned to that summer program; teachers in negative schools were more likely to have chosen it.
5. teachers in positive schools were in general more satisfied with various aspects of the program than were those in negative schools.
6. teachers in positive schools tended to disagree with the following statement, teachers in negative schools to agree: "The pupils want to learn but they do not have the right background for school work."

Analyses of variance testing the pretest and posttest Total Reading Achievement differences between Summer Title I and Non-Title I schools were also performed. Table 43 shows the results of these analyses.

Table 43

Pretest (Spring 1973) and Posttest (Summer 1973) Total Reading Achievement Differences Between Summer Title I and Non-Title I Schools

Dependent Variable	Grade	D.F.	t	Difference	Title I Mean	Title I N	Non-Title I Mean	Non-Title I N
Pretest	2	20	4.3[3]	NT > T	84.1	14	104.5	7
	4	14	3.4[2]	NT > T	81.2	9	102.1	6
	6	9	NS		95.0	4	114.6	6
Posttest	2	20	4.0[3]	NT > T	83.5	14	105.5	7
	4	14	2.5[1]	NT > T	78.8	9	98.1	6
	6	9	NS		89.2	4	109.7	6

[1].05 level

[2].01 level

[3].001 level

Reference to Table 43 reveals that Summer Non-Title I schools exceeded Summer Title I schools in terms of Spring and Summer total reading achievement in grades 2 and 4.

Analyses of covariance testing the Total Reading Achievement Spring/Summer gain differences between Summer Title I and Non-Title I schools were also performed. There were no statistically significant differences at any grade level.

Analyses of covariance were performed to assess the Spring/Summer achievement gain differences among summer study schools, with the effects of funding category removed. The unit of analysis is the individual student. Table 44 shows the results.

Reference to Table 44 shows that, for grades 2 and 4, there are significant achievement gain differences among summer study schools within the various funding source categories.

Table 44

Total Reading Achievement Spring/Summer Gain Among Schools Offering A Summer 1973 Program, With The Effects of Funding Source Removed

Grade	D.F.	F	Proportion of Variance Explained by Differences Among Schools
2	20;122	2.7[3]	.30
4	13;56	2.1[1]	.33
6	9;43	NS	

[1]significant at .05 level

[2]significant at .01 level

[3]significant at .001 level

Note: Regression lines for each of the above covariance analyses were parallel.

As a part of the cost study of summer programs, these programs were categorized by focus or thrust:[1]

1. Remedial--"implies the program is designed to help children who are falling behind."
2. Enrichment--"implies the program is primarily for the enjoyment of the student and its primary objectives would be to make students like school and to improve the students' self-concept."
3. Remedial/Enrichment--"implies that aspects of both are used."
4. Compensatory--"similar to Remedial, but with more emphasis on helping disadvantaged children."

Programs were thus classified by the cost study interviewer during his site visit, after consultation with the principal or program administrator. Linear analyses of covariance were performed separately by grade, using in turn each of the Summer 1973 reading achievement and attitude measures as the dependent variable, and the corresponding Spring 1973 measures as covariate. The school mean was the unit of analysis. The following contrasts, consisting of various combinations of the previously described program thrust categories, were tested:

[1]See Nabeel Al-Salam and Donald Flynn, "An Evaluation of the Cost Effectiveness of Alternative Compensatory Reading Programs. Volume IV: Cost Analysis of Summer Programs," Report UR-231. Resource Management Corporation: Bethesda, Md., 1976, p. 49.

1. Remedial vs. Enrichment
2. Remedial/Enrichment vs. Compensatory
3. Average of Remedial and Enrichment vs. average of Remedial/Enrichment and Compensatory

Joint tests of the above three contrasts, using grade 2 data, showed non-significant differences for each achievement and attitude measure. All slopes were parallel. From this result it may be concluded that the data showed no significant differences in Spring-Summer gain among the four summer program types for any achievement or attitude measure.

Because there was only one school in the "enrichment" category in each of grades 4 and 6, there were insufficient degrees of freedom to perform parallel analyses for those grades. Therefore, in grades 4 and 6 the following set of contrasts were tested:

1. Remedial/Enrichment vs. Compensatory
2. Remedial vs. the average of Remedial/Enrichment and Compensatory

Joint tests of the above two contrasts, separately for grade 4 and grade 6 data, showed non-significant differences for each achievement and attitude measure. All slopes were parallel. Thus it was not possible to show significant differences in Spring-Summer gain among the Remedial, Remedial/Enrichment, and Compensatory summer program types for any fourth or sixth grade achievement or attitude measure.

Table 45 shows the pretest (Spring 1973)/posttest (Summer 1973) correlations for each reading achievement and attitude toward reading measure.

Table 45

Spring/Summer Correlations of Reading Achievement and Attitude Measures

Grade	Measure	Correlation	N
2	MAT Word Knowledge	.87	147
	MAT Sentences	.73	146
	MAT Stories	.77	146
	MAT Reading	.84	146
	MAT Total	.89	146
	Cooperative Primary Reading	.80	147
	MAT Total + Coop.	.90	146
	Attitude	.63	124
4	MAT Word Knowledge	.87	81
	MAT Reading	.77	81
	MAT Total	.87	80
	Cooperative Primary Reading	.82	83
	MAT Total + Coop.	.90	80
	Attitude	.78	64
6	MAT Word Knowledge	.61	57
	MAT Reading	.71	57
	MAT Total	.70	57
	STEP II Reading	.85	58
	MAT Total + STEP	.81	56
	Attitude	.81	51

Analyses of variance were performed, testing jointly the previously described set of three program focus contrasts separately for pretest (Spring 1973) and posttest (Summer 1973) data. The only significant differences obtained were for STEP II Reading in grade 6, as shown in Table 46.

It should be noted that in each of the two administrations shown in Table 46, the Remedial vs. Enrichment comparison was the only significant one of the set tested (Spring administration, $t = 3.6$, D.F. = 7; Summer administration, $t = 4.1$, D.F. = 7).

Table 46

Significant Pretest (Spring 1973) and Posttest (Summer 1973) Differences Among Program Focus Categories, Grade 6

Variable	Administration	F(3,7 D.F.)	Prop. of Variance Explained By Comparison	Remedial Mean	Remedial N	Enrichment Mean	Enrichment N	Remedial/Enrichment Mean	Remedial/Enrichment N	Compensatory Mean	Compensatory N
STEP II Reading	Spring	4.6[1]	.66	30.5	5	54.5	1	38.5	3	34.0	2
STEP II Reading	Summer	5.6[1]	.71	30.4	5	54.5	1	35.9	3	34.6	2

[1]significant at the .05 level

In assessing the implications of the foregoing results, readers must judge for themselves the validity of the process whereby program focus was determined. The Resource Management Corporation report[1] describes this process thus:

> During the site visits conducted to these programs, the interviewer--after consultation with the principal or similar program administrator--classified the program thrust as remedial, enrichment, remedial/enrichment, or compensatory. There were programs on the boundaries between categories; however, they were assigned to the thrust category the interviewer felt was dominant.

---

[1] Nabeel Al-Salam and Donald Flynn, "An Evaluation of the Cost Effectiveness of Alternative Compensatory Reading Programs. Volume IV: Cost Analysis of Summer Programs," Report UR-231. Resource Management Corporation: Bethesda, Md., 1976, p. 49.

APPENDIX

☐☐☐☐☐

C.R.P. SUMMER PROGRAM SURVEY

ADMINISTRATOR (PRINCIPAL) QUESTIONNAIRE

SCHOOL_____

SCHOOL DISTRICT_____ STATE_____

NAME OF SUMMER PROGRAM ADMINISTRATOR_____

DIRECTIONS: This questionnaire is in two parts. The first part is intended to elicit information about your summer program and the students in it. PLEASE FEEL FREE TO CONSULT OTHERS IN THIS SCHOOL OR SCHOOL DISTRICT IN ORDER TO PROVIDE THE INFORMATION REQUESTED. The second part of the questionnaire has to do with compensatory reading instruction. By compensatory reading instruction is meant any reading instruction provided to students because they are reading below their grade level.

PART I

PLEASE PROVIDE THE FOLLOWING INFORMATION ABOUT YOUR SUMMER PROGRAM. Answer all questions with reference to the current summer unless otherwise indicated.

1. Enrollment this summer (number of pupils).

☐ Less than 50

☐ 50-99

☐ 100-199

☐ 200-299

☐ 300 or more

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2. Please indicate below the grades (or grade equivalents) included in your summer program. If you have a combination of graded and ungraded classes, indicate the instructional organization for each grade or, if ungraded, the equivalent grades in your school. (Check only one box in each row.)

Grade or Equivalent	Instructional Organization			
	NOT included in school	Graded	Ungraded	Graded & Ungraded
(a) Kindergarten	☐	☐	☐	☐
(b) Grade 1	☐	☐	☐	☐
(c) Grade 2	☐	☐	☐	☐
(d) Grade 3	☐	☐	☐	☐
(e) Grade 4	☐	☐	☐	☐
(f) Grade 5	☐	☐	☐	☐
(g) Grade 6	☐	☐	☐	☐
(h) Grade 7	☐	☐	☐	☐
(i) Grade 8	☐	☐	☐	☐

3. Number of classes at each grade level:

K_____ 3_____ 6_____

1_____ 4_____ 7_____

2_____ 5_____ 8_____

Special or ungraded_____

4. What is the length of the summer program?

☐ Three weeks or less
☐ Four weeks
☐ Five weeks
☐ Six weeks
☐ Seven weeks
☐ Eight weeks
☐ Nine weeks or more

5. How long is the school day in the summer?

- ☐ Same length as regular year school day
- ☐ Shorter than regular school day

5a. If the summer program day is a short one, is the program held in the morning or the afternoon?

- ☐ Morning
- ☐ Afternoon

6. Which of the following subject areas are offered in the summer program? (Mark one box for each area)

	For All Students	For Some Students	Not Offered
Reading	☐	☐	☐
Mathematics	☐	☐	☐
Language Arts	☐	☐	☐
Social Studies	☐	☐	☐
Music	☐	☐	☐
Art	☐	☐	☐
Crafts	☐	☐	☐
Swimming	☐	☐	☐
Other sports	☐	☐	☐
Other (specify)			
_____	☐	☐	☐
_____	☐	☐	☐

6a. Aside from formal reading instruction, which of the following do you consider to be reading-related activities as you define and execute them in your summer program? (Mark all that apply)

- ☐ Mathematics
- ☐ Language Arts
- ☐ Social Studies
- ☐ Music
- ☐ Art
- ☐ Crafts
- ☐ Swimming
- ☐ Other sports

6b. Are there any other activities included in your summer program that you consider to be reading-related?

- ☐ No
- ☐ Yes If Yes, please describe briefly:_____

_____

_____

7. How does the summer program differ from the regular school year program with respect to each of the following items? (Describe differences briefly for each)

Student population:_____

_____

Location:_____

_____

Instructional organization (class groupings):_____

_____

_____

Staff:_____

_____

Philosophy (goals):_____

_____

_____

Instruction:_____

_____

_____

7a. In approximate order of their importance, please list the goals of your summer program:

1. (Most important goal):_____

_____

_____

2. (Second most important goal):_____

_____

_____

3. (Third most important goal):_____

_____

_____

8. Please estimate the percentage of students in the summer program who are of the following racial or national origins. (Check only one box in each lettered row.)

	None	1-25%	26-50%	51-75%	76-100%
(a) Caucasian or White	☐	☐	☐	☐	☐
(b) Negro or Black	☐	☐	☐	☐	☐
(c) Spanish surnamed	☐	☐	☐	☐	☐
(d) Oriental	☐	☐	☐	☐	☐
(e) American Indian	☐	☐	☐	☐	☐
(f) Other (Specify) _____	☐	☐	☐	☐	☐

8a. Do you feel these are accurate estimates?

1 ☐ Yes

2 ☐ No

9. Are children enrolled in the summer program from schools not in your school's regular attendance area?

1 ☐ Yes

2 ☐ No

10. If children from other schools are enrolled, about what percentage of the total summer enrollment comes from outside of this school's regular attendance area?

1 ☐ 1-10%

2 ☐ 11-25%

1 ☐ 26-50%

2 ☐ More than half

11. Using your best professional judgment, rate each of the following characteristics of the summer program.

	Highly Adequate	Adequate	Inadequate	Highly Inadequate
Size of physical plant	☐	☐	☐	☐
Condition of physical plant	☐	☐	☐	☐
Suitability of physical plant for program operation	☐	☐	☐	☐
Number of instructional personnel	☐	☐	☐	☐
Number of other professional personnel	☐	☐	☐	☐
Number of teacher aides	☐	☐	☐	☐
Number of other non-professionals	☐	☐	☐	☐
Quantity of books, periodicals, and other printed materials	☐	☐	☐	☐
Suitability (quality) of books, periodicals, and other printed materials for instruciton	☐	☐	☐	☐
Quantity of audio-visual materials	☐	☐	☐	☐
Suitability (quality) of audio-visual materials for instruction	☐	☐	☐	☐
Quantity of instructional equipment	☐	☐	☐	☐
Suitability (quality) of instructional equipment for instruction	☐	☐	☐	☐

12. Estimate the percentage of students in your summer program of the following grade levels who are reading one or more years below grade level according to current test data. The estimate should be based upon the concept of national norms for the grade for which you are reporting.

(a) Grade 2

1 ☐ None
2 ☐ 1-10%
3 ☐ 11-25%
4 ☐ 26-50%
5 ☐ 51-75%
6 ☐ 76-90%
7 ☐ 91-100%

(b) Grade 4

1 ☐ None
2 ☐ 1-10%
3 ☐ 11-25%
4 ☐ 26-50%
5 ☐ 51-75%
6 ☐ 76-90%
7 ☐ 91-100%

(c) Grade 6

1 ☐ None
2 ☐ 1-10%
3 ☐ 11-25%
4 ☐ 26-50%
5 ☐ 51-75%
6 ☐ 76-90%
7 ☐ 91-100%

13. Does your summer program include at least some compensatory reading instruction as defined?

1 ☐ Yes — If so, please go to question 14 and complete the remainder of this quesitonnaire.

2 ☐ No — If not DO NOT COMPLETE THE REMAINDER OF THIS QUESTIONNAIRE. Instead, return the questionnaire to ETS in the postage-paid envelope provided. Thank you for your cooperation.

14. Please describe briefly below the compensatory reading instruction that takes place in your summer program.

_____

_____

_____

_____

14a. Is the compensatory reading instruction in your summer program funded totally or in part by funds (federal, state, local, or other) supplementary to the regular ongoing school budget?

☐ Yes

☐ No

☐ Don't know

15. What is the per pupil expenditure for your summer program?

_____

☐ Check here if you don't know

16. What are the total funds allocated for compensatory reading in your summer program?

_____

☐ Check here if you don't know

17. What are the costs per pupil of compensatory reading in your summer school?

_____

☐ Check here if you don't know

18. How are the costs of the summer compensatory reading program broken down?

Staff costs _____

Materials _____

Other _____

_____

Total _____

Check here if you cannot break down costs for program ☐

19. About what percentage of the students participating in the summer reading program in your school are from culturally, linguistically, and/or economically deprived backgrounds? (Mark one box in each lettered row.)

- ☐ None
- ☐ 1-10%
- ☐ 11-50%
- ☐ 51-90%
- ☐ 91-100%
- ☐ Don't Know

20. Indicate the approximate level of funding for the summer reading program in your school by each source indicated below.

	Total	Partial	None
FEDERAL			
ESEA Title I	☐	☐	☐
Other (Specify)			
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
STATE (Specify)			
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
LOCAL (Specify)			
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
OTHER			
_____	☐	☐	☐

☐ Check here if you cannot provide the information requested above.

21. What is the basis for determining pupil participation in summer reading program(s)? (Mark all that apply.)

- ☐ All students in the summer program participate
- ☐ Membership in one or more specific target groups (i.e. economically disadvantaged, migrants, non-English speaking)
- ☐ Depressed reading levels (as indicated by test results)
- ☐ Teacher (or other staff) recommendation
- ☐ Parent request
- ☐ Volunteer
- ☐ Other (Specify)_____

22. Does the summer reading program use parents or other volunteers (paid or unpaid) to help in the classroom?

- 1 ☐ Yes
- 2 ☐ No

23. Does the summer reading program use pupils as tutors?

- 1 ☐ Yes
- 2 ☐ No

24. Did you fill out a questionnaire like this for the Compensatory Reading Project during the 1972-73 school year?

- ☐ Yes
- ☐ No
- ☐ Don't know

PLEASE CHECK TO MAKE SURE ALL QUESTIONS HAVE BEEN ANSWERED.

THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.

C.R.P. SUMMER PROGRAM SURVEY

CLASS AND PROGRAM CHARACTERISTICS QUESTIONNAIRE

This questionnaire is designed to elicit information about your reading instruction and the group(s) to which you provide such instruction. Because reading instruction and instructional groups are so variable, some definitions are given below. Please keep the definitions in mind as you answer the questions, and refer to them as often as you need to.

In many instances, the questionnaire asks for information about classes. For purposes of this study, a class is any instructional group that is exposed to a common set of materials, personnel and/or services, however large and extensive that set might be, and that can sensibly be treated as a group in terms of its general characteristics. IF YOU ARE A MEMBER OF A TEAM THAT TOGETHER INSTRUCTS SUCH A GROUP, PLEASE COMPLETE THIS QUESTIONNAIRE TOGETHER WITH THE OTHER MEMBER(S) OF THE TEAM.

If your class includes children from several grade levels, please answer the questionnaire with respect to the grade level(s) that are appropriate to this study (2, 4, and/or 6).

1. CLASS CHARACTERISTICS

If you are a classroom teacher, answer questions 1 and 2. If you are NOT a classroom teacher, skip to question 3.

1. What grade do you teach?

- ☐ Two
- ☐ Four
- ☐ Six
- ☐ Ungraded (Give equivalent grades_____)

1a. How many pupils are in your class? (Give actual number)_____

How many are boys?_____

How many are girls?_____

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2. Which of the following subject areas do you teach in the summer program? (Mark all that apply)

- ☐ Reading
- ☐ Mathematics
- ☐ Language Arts
- ☐ Social Studies
- ☐ Music
- ☐ Art
- ☐ Crafts
- ☐ Swimming
- ☐ Other supervised sports
- ☐ Other (specify)_____

3. How do the pupils in your class receive reading instruction?

- ☐ All of the pupils in my class receive reading instruction
  - ☐ from me
  - ☐ some from me and some from another teacher
- ☐ Selected pupils in my class receive reading instruction
  - ☐ from me
  - ☐ some from me and some from another teacher

The following questions refer ONLY to those pupils who receive their reading instruction from you. If you are a classroom teacher, and if all of the pupils in your class receive reading instruction, answer the questions in terms of the total class. IF ONLY SOME OF THE PUPILS RECEIVE READING INSTRUCTION FROM YOU, ANSWER IN TERMS OF THOSE PUPILS ONLY. If you provide reading instruction to more than one class (as class is described above), answer the questions with respect to one class per program. Answer the questions with reference to the class in any given program that meets earliest each week. Be sure to include all meetings of that class. If you do teach reading to more than one class, indicate in the box how many classes you teach.

☐

4. How many pupils receive reading instruction from you? (Include any pupils who may be sent to your classroom especially for reading instruction.)

   Total number of pupils_____

   a. How many are boys?_____

   b. How many are girls?____

5. What is the age range of the children in your reading class?

   Age of oldest child: ____/____ (Years Months) Age of youngest child: ____/____ (Years Months)

For purposes of this survey, compensatory reading instruction is any reading instruction provided to students because they are reading below grade level.

6. To what extent is your summer reading instruction compensatory (according to the definition given above)?

   - ☐ Compensatory for all students in the class
   - ☐ Compensatory for some students in the class
   - ☐ Not compensatory at all

7. What percentage of the pupils in your reading class have received compensatory reading instruction during the school year prior to this summer?

   - ☐ None
   - ☐ 1-25%
   - ☐ 26-50%
   - ☐ 51-75%
   - ☐ 76-100%
   - ☐ Don't know

8. About what percent of the pupils in your summer reading class are members of the following racial or national origin groups? (Mark one box in each lettered row.)

	None	1-25%	26-50%	51-75%	76-100%
(a) Caucasian or White	☐	☐	☐	☐	☐
(b) Negro or Black	☐	☐	☐	☐	☐
(c) Spanish surnamed	☐	☐	☐	☐	☐
(d) Oriental	☐	☐	☐	☐	☐
(e) American Indian	☐	☐	☐	☐	☐
(f) Other Specify_____	☐	☐	☐	☐	☐

9. Estimate the percentage of pupils in your summer reading class who have persistent problems in each of the following areas. (Mark one box in each lettered row.)

	None	1-10%	11-50%	51-100%	Don't Know
(a) Speech	☐	☐	☐	☐	☐
(b) Vision	☐	☐	☐	☐	☐
(c) Hearing	☐	☐	☐	☐	☐
(d) Frequent illness	☐	☐	☐	☐	☐
(e) Mental retardation	☐	☐	☐	☐	☐
(f) Emotional problems	☐	☐	☐	☐	☐
(g) Family instability	☐	☐	☐	☐	☐
(h) Other (Specify)	☐	☐	☐	☐	☐

_____

10. What is the average absentee rate in your summer reading class? (About what percentage of the class is absent on any given day?)

☐ 0-10%

☐ 11-20%

☐ 21-30%

☐ 31-40%

☐ 41-50%

☐ More than 50%

11. What of the following would you judge to be the major causes of absenteeism among your pupils? (Mark Yes or No for each cause.)

1 Yes	2 No	
☐	☐	Illness of pupil
☐	☐	Illness of other family member(s)
☐	☐	Lack of parental concern
☐	☐	Need for pupil to perform other duties at home
☐	☐	Suspension or expulsion
☐	☐	Other (Specify)_____

Questions 12 and 13 ask for your opinions about the pupils you teach. Please answer the questions as candidly as you are able; there are no "right" answers.

12. How far do you expect the average pupil in your summer reading class would be able to go in school if he were given the opportunity?

- ☐ Eighth grade, or lower
- ☐ Ninth, tenth, or eleventh grade
- ☐ High school graduate
- ☐ Junior college, business school, or some other post-secondary course, but not a four year college
- ☐ Four year college or beyond
- ☐ Other (Specify) _____

13. How far do you expect the average pupil in your summer reading class will actually go in school?

- ☐ Eighth grade, or lower
- ☐ Ninth, tenth, or eleventh grade
- ☐ High school graduate
- ☐ Junior college, business school or some other post-secondary course, but not a four year college
- ☐ Four year college or beyond
- ☐ Other (Specify)_____

II. PROGRAM CHARACTERISTICS

The following questions refer to your summer reading instruction (see definition on page 1). If you are a classroom teacher, and all of the pupils in your class receive reading instruction, answer the questions in terms of the total class. If only some of the pupils receive reading instruction, answer the questions in terms of those pupils only, and in terms of that part of the instructional program that is directed to them.

If you are a reading teacher or specialist teacher, answer the questions with reference to the class to which your instruction applies. If you teach more than one class (as class is defined on page 1), answer the questions with reference to the one class per program that meets earliest in the week. Be sure to include all meetings of that class.

If you do teach more than one class, check this box. ☐

14. When is reading instruction carried out? (Check all that apply.)

- ☐ During regular summer school hours in time scheduled for reading instruction
- ☐ During regular summer school hours in time released from other class work
- ☐ Before or after school or on weekends
- ☐ Other (Specify) _____

15. What is the average amount of formal instruction time per student in reading?

a. Minutes per instructional period:

- ☐ 1-15
- ☐ 16-30
- ☐ 31-40
- ☐ 41-50
- ☐ 51-60
- ☐ 61-75
- ☐ 76-90
- ☐ 91 or more

b. Number of instruction periods per week:

- ☐ One
- ☐ Two or three
- ☐ Four or five
- ☐ More than five

16. Do most pupils receive reading instruction at the same time of day every instructional day?

- 1 ☐ Yes
- 2 ☐ No

a. If yes, when is the instructional period?

- ☐ Before school
- ☐ Morning
- ☐ Afternoon

17. What additional personnel are available to you in your teaching of reading in the summer program?

	Frequently	Occasionally	Rarely	Not Available
Remedial reading teacher or supervisor	☐	☐	☐	☐
Other professionals (counselors, psychologists, etc.)	☐	☐	☐	☐
Paraprofessionals or teacher aide	☐	☐	☐	☐
Parent or other volunteer	☐	☐	☐	☐
Student teacher	☐	☐	☐	☐
Media specialist	☐	☐	☐	☐
Resource teacher (music, art, etc.)	☐	☐	☐	☐
Older student in school	☐	☐	☐	☐
Other (Specify)_____	☐	☐	☐	☐

_____

18. During the summer, how many teachers other than yourself have held your particular teaching assignment with your reading class for at least two consecutive weeks? COUNT SUBSTITUTE TEACHERS AND REPLACEMENT TEACHERS; DO NOT COUNT STUDENT TEACHERS OR CLASSROOM AIDES.

- ☐ None
- ☐ One
- ☐ Two
- ☐ Three
- ☐ More than three

19. If your reading class is organized into groups, indicate the frequency with which you organize these groups by each of the following criteria.

	Frequently	Occasionally	Rarely	Never
Reading grade level	☐	☐	☐	☐
Specific skill deficiencies	☐	☐	☐	☐
Shared interests	☐	☐	☐	☐
Specific projects	☐	☐	☐	☐
Other (Specify)_____	☐	☐	☐	☐

_____

20. How often do the following instructional groups operate (occur) in the course of your teaching of reading?

	Frequently	Occasionally	Rarely	Never
Adult and child in one-to-one relationship	☐	☐	☐	☐
Adult and children in groups of between 2 and 10	☐	☐	☐	☐
Adult and children in groups or more than 20 (includes whole class instruction)	☐	☐	☐	☐
Individual pupils working independently	☐	☐	☐	☐
Pupil teams working independently	☐	☐	☐	☐
Other (Specify)_____	☐	☐	☐	☐

_____

21. If your reading class is organized into groups, about how frequently does the composition of the group change?

☐ Daily

☐ Weekly

☐ Bi-weekly

☐ Monthly

☐ Rarely, if ever

☐ Other (Specify)_____

22. In a sentence or two, describe the outstanding features of your summer reading instruction.

_____

_____

_____

_____

23. In a sentence or two, explain how your summer reading instruction differs from the instruction during the regular school year._____

_____

_____

24. Which one of the following terms comes closest to describing your major classroom approach to the teaching of reading?

- ☐ Linguistic-phonetic
- ☐ Language experience
- ☐ Combination of linguistic-phonetic and language experience
- ☐ Modified alphabet
- ☐ Eclectic
- ☐ Other (Specify)_____

25. How long have you used this method?

- ☐ This is the first year
- ☐ For one or two years
- ☐ For three, four, or five years
- ☐ For six years or more

26. To what extent do you use each of the following approaches to teaching reading in your classroom?

	Not at All	Minimally	Somewhat	Extensively
Basal readers	☐	☐	☐	☐
Programmed instruction	☐	☐	☐	☐
A total phonics program	☐	☐	☐	☐
A supplementary phonics program	☐	☐	☐	☐
Language experience	☐	☐	☐	☐
A linguistic program	☐	☐	☐	☐
Non-standard orthography (ex., i.t.a.)	☐	☐	☐	☐
Words in color	☐	☐	☐	☐
Individualized programs	☐	☐	☐	☐
Technological devices (ex., "talking typewriter", teaching machines)	☐	☐	☐	☐
Other (Specify and describe)	☐	☐	☐	☐

_____

_____

_____

27. Who selected the materials that you are using this summer in your teaching of reading?

☐ You, and you alone

☐ You, as a member of a team or committee

☐ An individual, team, or committee, operating without any input from you

☐ Other (Specify)_____

28. How satisfied are you with the materials you are using this summer in your teaching of reading?

- ☐ Totally satisfied
- ☐ Satisfied in major aspects; dissatisfied in some minor ones
- ☐ Lukewarm; neither devoted nor opposed to the materials
- ☐ Dissatisfied in major aspects; satisfied only in some minor ones
- ☐ Totally dissatisfied

29. How frequently do you use the following materials in the course of your reading instruction?

	Not Available	Often	Sometimes	Rarely or Never Use
Textbooks other than basal readers	☐	☐	☐	☐
Books and printed materials other than textbooks	☐	☐	☐	☐
Newspapers, magazines, and other periodicals	☐	☐	☐	☐
Teacher-prepared materials (dittos, etc.)	☐	☐	☐	☐
Motion pictures and/or filmstrips	☐	☐	☐	☐
Slides and transparencies	☐	☐	☐	☐
Tape recordings and records	☐	☐	☐	☐
Video or television tapes	☐	☐	☐	☐
Games, puzzles, and toys	☐	☐	☐	☐
Other (Specify)_____	☐	☐	☐	☐

_____

30. How much time does a typical pupil in your summer reading class spend in each of the following types of activity?

	A great deal	Some	Little or none
Improving motor abilities related to reading	☐	☐	☐
Increasing attention span	☐	☐	☐
Developing visual discrimination	☐	☐	☐
Matching letters or words	☐	☐	☐
Learning letter forms	☐	☐	☐
Developing a sight vocabulary (Whole word recognition)	☐	☐	☐
Learning word meanings (Vocabulary)	☐	☐	☐
Phonic and/or structural analysis	☐	☐	☐

31. Have you had any special training in the teaching of reading or in instructional techniques for disadvantaged pupils in connection with your current teaching assignment?

1 ☐ Yes

2 ☐ No

If no, skip to question 35.

If yes, please answer questions 31-34.

32. What form did the special training take? (Check all that apply.)

☐ Summer workshop or institute

☐ College course (whether or not for degree credit)

☐ After school or weekend workshop(s)

☐ Released-time workshop(s)

☐ Individual instruction with supervised practice teaching

☐ Other (Specify)_____

33. Which of the following areas were explored in the course of the special training you received? (Check all that apply.)

- ☐ New instructional techniques in reading
- ☐ Diagnosis of reading problems
- ☐ Open classroom methods
- ☐ Individualized instruction
- ☐ Use of equipment and materials
- ☐ Techniques for cultural enrichment
- ☐ Other (Specify)_____

34. Over what time period did the special training extend?

- ☐ One summer
- ☐ One academic semester
- ☐ One academic year
- ☐ One calendar year
- ☐ One summer and one academic year
- ☐ Other (Specify)_____

35. How long ago did you receive your special training?

- ☐ Less than one year ago
- ☐ More than one but less than two years ago
- ☐ More than two but less than three years ago
- ☐ Three or more years ago

36. For a typical pupil in your summer reading program, about how much time is devoted to each of the following reading or reading-related activities?

	None	Less than 1 hour per week	Between 1 and 4 hours/week	More than 1 hour a day (5+ hours/week
Basic reading instructional program	☐	☐	☐	☐
Compensatory reading	☐	☐	☐	☐
Instructional program (only if compensatory reading program is different from basic instructional program)	☐	☐	☐	☐
Reading in content areas (Science, Social Studies, etc.)	☐	☐	☐	☐
Independent (self-selected) reading	☐	☐	☐	☐
Library activities	☐	☐	☐	☐
Enrichment activities (include trips, special assemblies, etc.)	☐	☐	☐	☐
Other relevant activities (Specify)_____	☐	☐	☐	☐

_____

_____

_____

37. Please indicate below what materials you use in your reading instruction, and to what extent you use them.

	Series Titles(Specify)	Use as major resource in teaching reading	Use as supplemental or optional course in class	Occasionally refer to myself but don't use in class	Don't use at all
Scott Foresman	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Harper Row	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Macmillan	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
American Book Co.	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Ginn & Co.	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Houghton-Mifflin	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Lippincott	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Allyn & Bacon	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Holt, Rinehart & Winston	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
SRA	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
Harcourt Brace & World	_____	☐	☐	☐	☐
	_____	☐	☐	☐	☐
	Open Court	☐	☐	☐	☐
	ITA	☐	☐	☐	☐
	Merrill Linguistics	☐	☐	☐	☐

List all additional materials used, including hardware	Use as major resource in teaching reading	Use as supplemental or optional course in class	Occasionally refer to myself but don't use in class
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐
_____	☐	☐	☐

38. Do you create any of the materials you are currently using in teaching reading?

1 ☐ Yes

2 ☐ No

a. If Yes, which of the following types of materials do you create? (Check all that apply)

☐ Worksheets

☐ Printed stories, poems, or essays

☐ Transparencies for overhead projector

☐ Filmstrips

☐ Slides

☐ Motion Pictures

☐ Charts

☐ Tapes

☐ Other (Specify)_____

39. How would you rate each of the following activities in terms of importance to you as goals in your current teaching of reading?

	Major Goal	Secondary Goal	Of little or no Importance as a goal
Improving motor abilities related to reading	☐	☐	☐
Increasing attention span	☐	☐	☐
Developing auditory discrimination	☐	☐	☐
Matching letters or words	☐	☐	☐
Learning letter forms	☐	☐	☐
Developing a sight vocabulary (Whole word recognition)	☐	☐	☐
Learning word meanings (Vocabulary)	☐	☐	☐
Phonic and/or structural analysis	☐	☐	☐
Developing skill in using context clues	☐	☐	☐
Practicing syllabification skills	☐	☐	☐
Practicing punctuation and paragraph skills	☐	☐	☐
Developing comprehension skills	☐	☐	☐
Improving comprehension rate	☐	☐	☐
Developing listening skills	☐	☐	☐
Reading aloud	☐	☐	☐
Reading silently (independent silent reading)	☐	☐	☐
Developing study skills	☐	☐	☐
Developing library skills	☐	☐	☐
Improving verbal communication	☐	☐	☐
Creative writing	☐	☐	☐
Reading for enjoyment	☐	☐	☐

	Major Goal	Secondary Goal	Of little or no Importance as a goal
Enriching cultural background	☐	☐	☐
Improving self-image	☐	☐	☐
Improving attitudes toward reading	☐	☐	☐
Other (Specify)_____	☐	☐	☐

_____

40. About how often does each child in your reading class have the opportunity to read aloud to the class?

- ☐ At least once a day
- ☐ Several times a week, but not daily
- ☐ About once a week
- ☐ Less than once a week, but regularly
- ☐ Seldom or never on a regular basis

41. About how often does each child in your reading class have the opportunity to read aloud to you alone (or to another adult)?

- ☐ At least once a day
- ☐ Several times a week, but not daily
- ☐ About once a week
- ☐ Less than once a week, but regularly
- ☐ Seldom or never on a regular basis

42. How successful would you consider your reading teaching to be with respect to each of the following criteria?

	Highly Successful	Moderately Successful	Moderately Unsuccessful	Totally Unsuccessful
Enhancing pre-reading skills	☐	☐	☐	☐
Enhancing measured reading achievement	☐	☐	☐	☐
Improving attitudes toward reading	☐	☐	☐	☐
Improving students' self images	☐	☐	☐	☐
Remediating cultural deprivation	☐	☐	☐	☐

43. Use this space for additional comments.

_____

_____

_____

_____

_____

PLEASE CHECK TO MAKE SURE ALL QUESTIONS HAVE BEEN ANSWERED.

THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.

C.R.P. SUMMER PROGRAM SURVEY

TEACHER CHARACTERISTICS QUESTIONNAIRE

This questionnaire is one of several that are designed to provide information about summer programs and the students enrolled in them. Please answer all questions with reference to the current summer and the students you are presently teaching.

1. What is your sex? ____Male ____Female

1a. What grade(s) are you teaching this summer? (Mark all that apply)

- ☐ Two
- ☐ Four
- ☐ Six
- ☐ Multiage (specify grade levels represented_____)
- ☐ Other (specify_____)

2. Which of the following represents your current employment status?

- ☐ A teacher (or other staff member) in this school during the regular school year
- ☐ A teacher (or other staff member) in another school in this district during the regular school year
- ☐ A summer employee only
- ☐ Other (specify)_____

2a. If you are a regular (full-year) employee of this school district, is the summer assignment part of your full-year contract, or is it an independent arrangement for additional pay?

- ☐ Full-year contract, one salary
- ☐ Full-year, extra pay for summer
- ☐ Summer contract only
- ☐ Other (specify)_____

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3. How many years of teaching experience (public and nonpublic), including this past school year, have you had?

- ☐ One year or less
- ☐ More than 1 year but less than 3 years
- ☐ At least 3 years but less than 6 years
- ☐ At least 6 years but less than 10 years
- ☐ At least 10 years but less than 20 years
- ☐ Twenty years or more

4. How many years, including this summer, have you taught in a summer program? (Include all summer programs you have taught in, whether in this district or another.)

- ☐ One year or less
- ☐ More than 1 year but less than 3 years
- ☐ At least 3 years but less than 6 years
- ☐ At least 6 years but less than 10 years
- ☐ At least 10 years but less than 20 years
- ☐ Twenty years or more

5. What type of teaching certification do you have?

- ☐ No certificate
- ☐ Temporary, provisional, or emergency certification
- ☐ Regular certification

6. What is the highest earned college degree you hold? (Do not report honorary degrees.)

- ☐ No degree
- ☐ A degree or diploma based on less than 4 years of work
- ☐ A bachelor's degree
- ☐ A master's degree
- ☐ A doctor's degree (EdD, PhD, etc.)

7. Have you had any special training in the diagnosis and treatment of reading problems?

☐ Yes ☐ No

7a. If yes, at what academic level was the training?

☐ Undergraduate

☐ Graduate

☐ Inservice

☐ On the job

☐ Other (specify)_____

8. Are most of your summer students of the same racial or national origin as you?

☐ Yes ☐ No

9. Were you assigned to or did you choose the summer program in which you are teaching?

☐ Was assigned to school ☐ Chose school

10. Were you assigned to or did you choose to teach the group you are teaching this summer?

☐ Was assigned to class ☐ Chose class

The questions that follow are all designed to elicit your opinions about your summer program, the pupils you teach, and any compensatory reading program you might be involved in. Please answer the questions as candidly as you are able. There are no "right" answers to these questions; we are interested in obtaining some information about how teachers feel about compensatory reading programs and about the pupils in them.

11. Compared with other schools and programs in your district or community, how satisfied are you with respect to the following things about your summer program?

	Highly Satisfied	Moderately Satisfied	Moderately Dissatisfied	Highly Dissatisfied
Physical facilities (buildings, etc.)	☐	☐	☐	☐
Faculty (teachers)	☐	☐	☐	☐
Ability of student body	☐	☐	☐	☐
Attitudes of student body	☐	☐	☐	☐
Administration	☐	☐	☐	☐
Overall philosophy of education	☐	☐	☐	☐

12. How responsive is the summer program administration to any requests you might make for additional teaching materials or equipment?

- ☐ Highly responsive
- ☐ Moderately responsive
- ☐ Not at all responsive

13. For remedial or other help for one of your students?

- ☐ Highly responsive
- ☐ Moderately responsive
- ☐ Not at all responsive

14. For changes in your curriculum?

- ☐ Highly responsive
- ☐ Moderately responsive
- ☐ Not at all responsive

15. Do you believe there is a sound basis in educational policy for giving compensatory programs to disadvantaged students at extra per pupil cost?

- ☐ Definitely yes
- ☐ Probably yes
- ☐ I am undecided
- ☐ Probably no
- ☐ Definitely no

16. Do you believe that compensatory programs are generally worthwhile?

- ☐ Definitely yes
- ☐ Probably yes
- ☐ I am undecided
- ☐ Probably no
- ☐ Definitely no

17. Did you fill out a questionnaire like this for the Compensatory Reading Project for the 1972-73 school year?

- ☐ Yes
- ☐ No
- ☐ Don't know

18. The following statements are all related to the academic capabilities of disadvantaged pupils. For each statement, indicate the degree to which you agree or disagree with the idea expressed.

		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Disagree
a.	With proper instruction they can learn about as well as any other pupils.	☐	☐	☐	☐	☐
b.	No matter how good the instruction these pupils receive they will always score lower than middle class children.	☐	☐	☐	☐	☐
c.	These children do not want to learn.	☐	☐	☐	☐	☐
d.	The pupils want to learn but they do not have the right background for school work.	☐	☐	☐	☐	☐
e.	It has been sufficiently proven that such pupils will never do as well as other students.	☐	☐	☐	☐	☐
f.	Materials are more important than methods in the teaching of reading.	☐	☐	☐	☐	☐
g.	Methods are more important than materials in the teaching of reading.	☐	☐	☐	☐	☐
h.	The teacher's ability is more important than either methods or materials in the teaching of reading.	☐	☐	☐	☐	☐
i.	Disadvantaged children have more trouble learning to read than advantaged children.	☐	☐	☐	☐	☐
j.	Disadvantaged children have a shorter attention span than advantaged children.	☐	☐	☐	☐	☐
k.	Disadvantaged children have different linguistic experiences than advantaged children.	☐	☐	☐	☐	☐
l.	Disadvantaged children are disadvantaged mainly in that they do not have the foundation of concepts that advantaged children have.	☐	☐	☐	☐	☐
m.	Learning to verbalize complete thoughts is particularly important for disadvantaged children.	☐	☐	☐	☐	☐
n.	Improving the student's self-image as a learner is particularly important for disadvantaged children.	☐	☐	☐	☐	☐
o.	The ability to ask questions which require a complete answer is extremely important in teaching reading to disadvantaged children.	☐	☐	☐	☐	☐
p.	In teaching reading, a wrong response can be as useful as a correct response.	☐	☐	☐	☐	☐
q.	Disadvantaged children often have lower aspirations than advantaged children.	☐	☐	☐	☐	☐

Use this space for additional comments.

PLEASE CHECK TO MAKE SURE ALL QUESTIONS HAVE BEEN ANSWERED. THEN RETURN YOUR QUESTIONNAIRE TO ETS IN THE POSTAGE-PAID ENVELOPE PROVIDED. THANK YOU FOR YOUR COOPERATION.